

# HOMES OF CHARACTER



JOHN · HENRY · NEWSON



















Copyright 1913 by  
The John Henry Newson Co.  
Cleveland, Ohio.











# HOMES *of* CHARACTER

*By* JOHN HENRY NEWSON

1913



*Published by*

THE JOHN HENRY NEWSON COMPANY  
CLEVELAND, OHIO



# C O N T E N T S

DESIGNS		Page	DESIGNS		Page
No.			No.		
101	An English Plaster House . . . . .	182	157	A Simple Shingle House . . . . .	164
102	Modern Dutch Colonial . . . . .	249	158	A Seven Room Bungalow . . . . .	226
103	A Thatched Roof Cottage . . . . .	188	159	A Simple Colonial House . . . . .	223
104	A House for a Narrow Lot . . . . .	200	160	A Modified Swiss Type . . . . .	250
104-A	A Variation of No. 104 . . . . .	217	161	An English Shingle House . . . . .	165
105	A Modern English Cottage . . . . .	18-220-221	162	An English Residence . . . . .	276-277
105-A	A Development of No. 105 . . . . .	181	163	A Swiss Residence . . . . .	272-273
105-B	A Cobblestone Treatment . . . . .	244	164	A Hip Roof House . . . . .	19-194
105-C	A Variation of No. 105 . . . . .	166	165	An Attractive Bungalow . . . . .	16-18-280
105-D	A Cobblestone, Brick and Shingle Combination . . . . .	80-229	167	A Small Six-Room House . . . . .	261
106	A Cement Cottage . . . . .	262	168	An Artistic Design . . . . .	255
106-R	Rough Brick and Wide Siding . . . . .	174	169	A Dutch Colonial Cottage . . . . .	228
107	A Bungalow . . . . .	246	170	A Picturesque Six Room House . . . . .	231
108	An Enlargement of No. 105 . . . . .	267	171	A Siding and Half Timber House . . . . .	176
109	An English Half Timber House . . . . .	192-193	172	A Shingle and Clapboard House . . . . .	236
110	A Cement Bungalow . . . . .	167	174	A Home of Character . . . . .	158-159
111	A California Bungalow . . . . .	175	175	A Small Colonial House . . . . .	130-269
112	A Shingle and Clapboard Bungalow . . . . .	234-278	176	A Modern Home . . . . .	170
113	A Small Six Room Cottage . . . . .	199	177	A Quaint Old Fashioned House . . . . .	198
114	A Large Bungalow . . . . .	144-230	178	A Hillside Residence . . . . .	84-284-285
115	A Modest Cottage . . . . .	248	179	A Brown Shingled House . . . . .	195
116	English—Plaster and Shingles . . . . .	161	180	A Small Colonial House . . . . .	240
117	An American Home . . . . .	257-281	181	Large Shingles and Tile . . . . .	259-290
117-A	A Development of No. 117 . . . . .	247	182	A Square Shingled House . . . . .	163
118	A Dutch Colonial Cottage . . . . .	196-235-273	183	A Physician's Residence . . . . .	268
119	A Seven Room Cottage . . . . .	190-191	184	A Small Summer Cottage . . . . .	183
119-R	A Brick and Frame House . . . . .	156	185	A Dutch Colonial Cottage . . . . .	251
120	English Cottages . . . . .	265	186	A Small Colonial House . . . . .	19-215
121	A Pair of Cottages . . . . .	219	187	Remodeled from an Old Barn . . . . .	178
122	A Seven Room Bungalow . . . . .	279	189	An English Cottage Bungalow . . . . .	238-239
123	Modern English . . . . .	210	190	A Shingled House . . . . .	189
124	A Modern German Type . . . . .	171	191	A Six Room Home . . . . .	180
125	Dutch Colonial Lines . . . . .	179	192	A Neat Colonial House . . . . .	242
126	A Two Family House . . . . .	209	193	A Four Room Bungalow . . . . .	233
127	A Two Family Flat House . . . . .	241	194	An English Brick and Half Timber House . . . . .	204-205
128	An Extreme Colonial Type . . . . .	177	195	A Five Room Bungalow . . . . .	266
129	A Brick House . . . . .	243	196	A Five Room Bungalow . . . . .	277
130	Shingles and Wide Clapboards . . . . .	205	197	A Seven Room Bungalow . . . . .	275
131	An Old Colonial House . . . . .	197	198	A Five Room Bungalow . . . . .	285
132	A Five Room Cottage . . . . .	191	199	A Development of No. 112 . . . . .	245
133	An Inexpensive House . . . . .	234	200	A Six Room Bungalow . . . . .	211
134	An American Cottage . . . . .	254	201	An Inexpensive Double House . . . . .	256
135	A Six Room Cottage . . . . .	235	202	A Modern Farm Residence . . . . .	286
136	A Five Room Bungalow . . . . .	258	203	A Unique Double Residence . . . . .	274-275
137	An American Home . . . . .	237	205	A Duplex House . . . . .	281
138	A Queen Anne Treatment . . . . .	184	206	An Old Fashioned Colonial House . . . . .	186
139	A Half Timber Treatment . . . . .	169	207	An Artistic Design . . . . .	253
140	A Modern German Type . . . . .	227	208	A Cobblestone and Shingle House . . . . .	172-173
141	An "L" Shaped House . . . . .	264	209	A Modern English Home . . . . .	208-209
142	An English Cement and Half Timber House . . . . .	270-271	210	A Small Colonial Cottage . . . . .	239
143	An English House . . . . .	84-162-163	211	A Five Room Cottage . . . . .	283
144	A Variation of our No. 130 . . . . .	206	212	A Modern English Type . . . . .	213
145	An Adaptation of Dutch Colonial . . . . .	157	213	A Simple Colonial House . . . . .	282-283
146	A Story and a Half Bungalow . . . . .	216	214	A Small Bungalow . . . . .	154
147	A Large Bungalow . . . . .	214-215	215	A Colonial Residence . . . . .	218-219
149-A	A Character Home . . . . .	43-153	216	A Brick and Cement House . . . . .	232-233
149-B	Vertical Boards and Wide Siding . . . . .	201	217	A Dutch Colonial House . . . . .	70-224-225
150	A Cement and Half Timber House . . . . .	185	218	A Modified Dutch Colonial . . . . .	260-261
151	A Shingle Seashore Cottage . . . . .	202-203	219	A Six Room Cottage . . . . .	168
152	A Two Story Bungalow . . . . .	187	220	A Large Inexpensive House . . . . .	207
153	A Simple Character Home . . . . .	155	221	A Brick and Stucco Home . . . . .	263
154	A Wide House . . . . .	160	222	A Colonial House . . . . .	252
155	A Shingle House . . . . .	212	223	An Inexpensive House . . . . .	193
156	A Shingle House . . . . .	222	224	A Cheap Double House . . . . .	287



## ARTICLES

	Page
Advantages of Good Tin for Roofs, Valleys and Gutters . . . . .	36
Bathroom Fixtures (Enameled Iron) . . . . .	118
Bathroom Fixtures (Vitreous China and Porcelain) . . . . .	71
Brass Goods . . . . .	76
Building the Inexpensive Home . . . . .	17
Building of an Artistic Home, The . . . . .	23
Clothes Dryer, The . . . . .	93
Common Sense Varnish Talk for the Home Builder . . . . .	47
Difference Between Good and Common Sash Cord . . . . .	129
Doors . . . . .	23
Electricity . . . . .	124
Estimated Cost, The . . . . .	148
Floors . . . . .	28
Heating Problem, The . . . . .	56
Hot Air Heat . . . . .	53
Hot Water and Steam Heat . . . . .	56
Hot Water Heater, The . . . . .	67
How Correct Shading Will Make Your Windows More Attractive . . . . .	97
How to order plans . . . . .	288
Ideal Plastering . . . . .	39
Importance and Influence of Hardwood Floors, The . . . . .	28
Increased Value of the Home Where Birch Doors and Trim Are Used . . . . .	27
Keene's Cement . . . . .	44
Locks and Hardware . . . . .	100
Mantels and Tile . . . . .	106
Model Bathrooms of Character . . . . .	71
Modern Scientific Kitchen, The . . . . .	87
Need of Care in Brass Goods, The . . . . .	76
Not a Luxury But a Necessity . . . . .	67
Owning a Home . . . . .	9
Paint as a medium for interior decoration . . . . .	131
Pantryette, The . . . . .	87
Plaster . . . . .	39
Preservation of Wood, The . . . . .	51
Pressed Metal Radiators . . . . .	64
Refrigerator in the Modern Home . . . . .	85
Reviews and Criticisms . . . . .	152
Sash Cord . . . . .	129
Selecting a Lot . . . . .	14
Screens . . . . .	95
Slate . . . . .	33
Special Designs . . . . .	150
Tile . . . . .	106
Tin . . . . .	36
Vacuum Cleaners Part in Health and Home Building, The . . . . .	81
Vapor Heating . . . . .	61
Varnishes . . . . .	47
Weather Stripping of modern Homes, The . . . . .	145
What You Should Know About the Heating Plant . . . . .	64
Where to Get the Money . . . . .	21
Window Shades . . . . .	97
Wood Preservatives . . . . .	51
Word of Precaution About Your Roof, A . . . . .	33



ADVERTISERS

	Page
BATHROOM FIXTURES — Kohler Co.	294
BATHROOM FIXTURES — The Trenton Potteries Co.	295
BOILERS — Pierce, Butler & Pierce Mfg. Co.	304
BRASS GOODS — H. Mueller Mfg. Co.	296
CARBOLINEUM — Carbolineum Wood Preserving Co.	310
CLOTHES DRYER — The Mannen & Esterly Co.	301
CONTRACTORS — The Dixon Building Co.	318
DOORS — Paine Lumber Co., Ltd.	292
ELECTRICAL DEVICES — General Electric Co.	293
FIREPLACE FIXTURES — Shaw Mantel and Tile Co.	309
FLOUR BOX — The Mannen & Esterly Co.	300
HARDWARE — The Davis, Hunt, Collister Co.	291
HARDWOOD FLOORS — Wood-Mosaic Co.	307
HOT AIR FURNACE — The Mannen & Esterly Co.	301
HOT WATER FURNACE — Pierce, Butler & Pierce Mfg. Co.	304
HOT WATER HEATER — The Hoffman Heater Co.	315
INTERIOR FINISHES — Berry Bros.	306
KEENE'S CEMENT — Best Bros. Keene's Cement Co.	298
LINSEED OIL — National Lead Co.	320
MANTELS — Shaw Mantel and Tile Co.	309
ORIENTAL RUGS — D. Asadorian	319
PAINT — National Lead Co.	320
PANTRYETTE — The Pantryette Co.	302
PARQUET FLOORS — Wood-Mosaic Co.	307
PLASTER — The Kelley Island Lime and Transport Co.	297
PRESSED METAL RADIATORS — Pressed Metal Radiator Co.	308
RADIATORS — Pierce, Butler & Pierce Mfg. Co.	304
REFRIGERATORS — McCray Refrigerator Co.	303
SASH CORD — Puritan Cordage Mills	313
SCREENS.	316
SHINGLE STAINS — Berry Bros.	306
SLATE — Genuine Bangor Slate Co.	311
STAINS — Berry Bros.	306
STEAM FURNACE — Pierce, Butler & Pierce Mfg. Co.	304
TILES — Shaw Mantel & Tile Co.	309
TIN — Follansbee Brothers Co.	312
VACUUM CLEANER — The United Electric Co.	305
VAPOR HEATING — The Mouat-Squires Co.	299
VARNISHES — Berry Bros.	306
WEATHER STRIP — J. J. Rauscher	317
WHITE LEAD — National Lead Co.	320
WINDOW SHADES — Chas. W. Breneman Co.	314
WIRING DEVICES — General Electric Co.	293
WOOD PRESERVATIVE — Carbolineum Wood Preserving Co.	310



# F O R E W O R D

---

SUCCESS attending the publication of the first edition of "HOMES OF CHARACTER," copies of which were sent to every country in the World, and the volume of work secured through this medium, has induced us to publish this, a Second Edition, in which we have incorporated a large number of new house designs and a series of articles, by the leading authorities on the various materials and accessories which enter into the construction and equipment of the modern home. There are also articles which will assist in selecting a location and in financing the building of a home.

We desire to thank Stanley L. McMichael, E. G. Gilbert, W. R. Creer, Paine Lumber Co., Wood-Mosaic Co., Genuine Bangor Slate Co., J. C. Kilroy, The Kelley Island Lime & Transport Co., The Best Bros. Keene's Cement Co., Charles H. Smith, C. H. Hoyt, Joseph E. Mannen, Pierce, Butler & Pierce Mfg. Co., Pressed Metal Radiator Co., The Mouat-Squires Co., The Hoffman Heater Co., A. K. Aitkin, H. Mueller Mfg. Co., F. W. Eichorn, McCray Refrigerator Co., The Pantryette Co., J. J. Rauscher, Chas. W. Breneman & Co., Yale, L. F. Shaw, Kohler Co., General Electric Co., Chas. T. Wolfe, National Lead Co., Harold McGeorge and others, who kindly furnished the articles and illustrations which add much of interest to this book.

It is not necessary to dwell on the advantages of employing a good architect to design your home, or on our qualifications to do the work, and furnish the plans, either from the designs carried in stock, modifications or enlargements of these designs, or special designs prepared in accordance with your ideas or requirements.

We refer you to satisfied clients all over the United States, as to our ability and the character of our work, and to any bank or mercantile agency as to our financial responsibility.

JOHN HENRY NEWSON (Inc.)

CLEVELAND, OHIO, U. S. A.  
April, 1913.









By STANLEY L. McMICHAEL

Secretary The Cleveland Real Estate Board

**F**EW subjects interest the average man or woman as much as that of owning a home.

There seems to be some deep undercurrent in everyone's nature which, sooner or later, expresses itself in the desire to own a spot called home.

Man may drift along through life for a few years content to exist in hotels, boarding houses or apartments, but there comes a day when at last he experiences a deep set conviction that he should own a home. Few persons of normal temperament escape this conviction.

The desire to have one spot on earth which one may call his own is as old as time and can not be eradicated. Even Adam and Eve, the parents of humanity, merely responded to this impulse when they set themselves up in Eden. Away back there in the dawn of civilization, home owning was a simple process compared to the somewhat intricate features of possessing a home today.

Even during the past twenty-five years there have been many influences at work which go to change the conditions under which home owning may become a reality. A few years ago all that was necessary was to erect a building by the construction of a few bare rooms with a chimney to carry away the smoke. No thought was given to artificial heating beyond that supplied through the medium of a stove, or of light beyond the supplying of suitable windows.

Today the average man confronts serious problems when he starts out to investigate the subject of home owning, and judicious study is necessary if he is to avoid many pitfalls.

It really requires an expert to construct a home these days. What with artificial heating systems, lighting systems, ventilating systems and all the other paraphernalia which enters into a modern home, not to speak of the complex features of home building now in existence, it is with some timidity that the subject is approached by those who have little knowledge of what they are undertaking.

Good judgement, perhaps, is the most needed element to the man who would own a home and good judgement is seldom acquired without experience. The wise man is the one who is willing to benefit by the experience of others or else, who is willing to acquire the assistance of experts in the working out of his problems.

Does it pay to attempt to build a home without assistance of an architect? Decidedly, No! Unless the building is to be a mere shell for summer use only, it seldom pays to attempt to build without the assistance of someone who is qualified to give

advice, either in the form of carefully prepared plans which have been perfected through actual experience in construction, or by the engaging of an architect to study specific conditions and to supply plans to meet them.

From those who have built on their own initiative, without such assistance, comes many a wail. Overhead room for stairways has not been sufficient; porch roofs have not been sloped enough; many defects have been experienced in structural work; doorways have not been placed properly; there has been a decided lack of wall space for the necessary furniture used in the various rooms and many other defects have been noted. These seldom suggested themselves at the time the building was planned but when it was put into use they stood out in a most glaring manner. Among those who are in any way qualified to express their opinions on the subject there seems to be no divergence of opinion but that a little money spent for architectural service of some kind is money well invested.

The problem often suggests itself as to whether one can more profitably afford to buy a home already constructed or proceed with building operations himself. In some few instances real bargains can be secured by buying homes already erected. Naturally, however, nearly everyone has his own ideal of what a home should be and he is seldom able to secure a dwelling that spells "perfection" to his eye. There seems little doubt, then, but that the average man usually makes up his mind to go ahead and build himself if he can afford it.

It pays to go in debt for a home. There is everything to gain and, properly safeguarded, there seems absolutely nothing to lose. Be prepared, however, to assume responsibility.

Above all, don't rush headlong into the matter without due deliberation. Study the subject from every view. Become satisfied that you wish to really settle down and own a home of your own. Determine your exact financial status and about what sphere you may expect to revolve in. Keep your nerve with you and don't be afraid to aim high enough. The test will bring a response from you that will be surprising. Many a man with a few dollars in the bank has made up his mind to buy a \$5,000 home, plunged in, made good and cleared the whole thing of debt in six or eight years, as his condition in life has permitted.

Having fully determined that you really wish to assume the responsibility of being a home owner, what next?

Indulge in a little quiet study and make up your mind exactly what type of a home you wish. There is a wide variety in nearly every community to choose from. A little thought bestowed at this particular point will perhaps save much disappointment later on. Remember the banker's advice to choose investments slowly and once having made up your mind to dispose of them, sell quickly.

Do you fancy homes in the suburbs? Would you like to have a little chicken farm in the country conveniently situated to a car line by which you could come to town daily to your employment? Or, would you prefer a quiet little place in some good allotment within a reasonable distance of the center of the city? All have their advantages and disadvantages. There is always the problem, too, of building the house, if no buildings exist.

Small suburban homes on the outskirts of the city, with an acre or so of ground about them are becoming more popular every year. It is a good solid investment, too, if the property is located in a good neighborhood where values are sure to increase.



In placing the house it would be well to look to the future, when property thereabouts will be much more thickly populated, for then it may be possible to sell half of the ground for enough to pay the whole sum of the original investment. It is being done again and again in now thickly populated sections which were in the suburbs a few years ago.

In erecting such a home an important item is that of traction facilities. Choose a site on a good car line, where desirable people travel. Remember above all other things that it doesn't cost any more to build a fine home on a good site than on a poorly located one. The building cost is practically the same. Therefore, it pays to locate right in the first place, even if a somewhat larger investment for ground is entailed. Consult with those who know as to the future possibilities of the property.

See that there are city facilities in the way of light, sewerage, water supply, etc., or that there is a good chance to secure them soon. Look into the question of pavements, sidewalks and street improvements. Sometimes the improvements cost as much as the property itself but persons who are unfamiliar with land speculation seldom think of this, when enthused over a particular view, the proximity of a pretty brook or stretch of sandy beach or some fine old trees.

It needs a cold calculating disposition to buy a home site. Suppress your enthusiasm. Think of all of the detriments of the property which you can bring to mind and weigh them carefully. Make the owner or agent who is trying to sell you explain them all away. Maybe you won't secure the perfect home site—people seldom do—but it may help you avoid trouble and worry later on.

Winter isn't the time selected by most owners to sell property and it isn't fair to judge property at midwinter on the same basis as one would judge it in June. Nevertheless some astonishing drawbacks are brought to light in the winter which were never thought of while the roses were blooming.

Owning a little farm of five, ten or 15 acres is a dream which flits through the minds of many a city man, chained to a desk while his soul longs for the open.

Here's a little confidential advice from one who knows:

If you would own a farm, be prepared to expend money on it, especially, if you have never done practical farming. Gentlemen farmers near large cities are doing wonders in raising the standard of breeding in horses, cattle, chickens and hogs. They have palatial homes to which they retire during the warm weather and at the fall fairs they have fine exhibits—but they are not making money out of their farms. Instead they are costly toys, expensive fads which cost them thousands yearly. Don't imagine that there are not many successful farmers near large cities. There are—but they are not the fellows who bought little tracts of acreage, moved out with a lot of highfaluting ideas and ran out of money a few months afterward. If you have a steady income, are sure of a job, want some stirring exercise, have a few youngsters to raise, possess a wife who is bound up in her home and her children then get a little farm. Otherwise, it would probably be wiser to consider the small home in the suburbs as the best alternative.

There are innumerable problems in connection with country life that are not dreamed of by the average city man who would hie himself out into the sunny fields and sheltering woods. And every problem costs money. Don't forget it, either.

Having the means to surmount these drawbacks, once settled in a cozy home on a ten or fifteen acre farm one can really call his own, within easy access of the city, with your chickens and dogs, the joy of existence becomes a reality. But unless these con-

---

ditions can be brought about, unless you have the nerve to go in and win, and stick after having surmounted the earlier difficulties, it is perhaps better to assume lighter responsibilities.

By far the larger number of people, however, will find it to their convenience to live in the city. Then comes the problem of choosing a suitable homesite. While this looks simple, there are many important considerations to keep in mind. Future, satisfaction or disappointment hinge on the judicious selection of a lot on which to build your home.

“What kind of a home shall I build?”

This is the problem which always faces the home builder, after having secured a suitable site. It is a question which requires a lot of close study and attention. Sometimes the solution is made easy by general survey of the neighborhood. Frequently the home planner is inspired to build in a totally different way to his neighbors. When a site is large and picturesque he is constrained to fit a house into the landscape which will harmonize with it in every particular.

Individual tastes have a wide range of difference and every material has its warm advocates. Sometimes one is compelled to resort to an economical material for lack of capital. Often one uses the same material because it appeals to him as picturesque.

Roughly speaking there are four kinds of material from which to build—wood, brick, stone and cement. In some houses they are all present. In all there are usually two of them employed.

Undoubtedly, for the small house, costing less than \$5,000, wood is still the cheapest material which can be used. Cement and concrete construction are gradually being improved to such a state that soon houses costing from \$2,000 up can profitably be built from these materials. It is an undeniable fact that small concrete houses cost more than wood. For hundreds of years wood has been the chief material which has gone into the construction of dwellings.

Good wooden houses are still being built, but they are the exception to the rule. Too many builders nowadays rush up shells of wood, apply a coat or two of plaster to the interiors and a dab of paint to the outsides and then sell them for completed houses. Two years later all the windows are rattling, the wind is blowing under the doors and through the floors and it is almost impossible to keep them heated to a comfortable temperature in cold weather. Too many houses nowadays are being built to sell—not to live in. One takes more chances with a wooden house than with one of brick, stone or solid concrete, because the latter are of a more permanent nature and must necessarily be built better from the first.

If a wooden house is honestly built it is doubtless a good investment. One must be very careful, however, to check in every way possible the desire of a contractor to be slipshod and cheapen its construction. Good, honest lumber, properly dried, should enter into it. Proper supervision of the work while in progress should be kept by the architect or by the owner if he is his own architect. Aim to have a permanent structure which will be useful more than five or ten years. Don't skimp on essentials. The frills can be added later but rough construction work is hidden and cannot be improved after once having been covered.

Brick makes a very attractive material from which to build. In many communities brick is more expensive than stone, when the latter is quarried near by. In Cleveland there is not a great deal of difference in the average house. Fancy facing brick, however, soon runs into money. For working out effective color schemes brick is probably



the best building material to use, for it can be procured in a wide variety of colors and prices. Common brick is now seldom used for building houses. Shale brick makes a good material and very attractive dwellings can be erected from the large four and five-inch blocks used for paving streets and rural highways. Attractive bonds can be selected for setting the brick, so that the best colors and effects may be procured.

Cut stone is now seldom used for residences, unless they be of a large massive character. It proves rather expensive, but furnishes exceedingly interesting studies. Field stone or rubble, the small rough bowlders picked up on the average farm, when attractively set in cement, makes one of the most picturesque buildings imaginable. Charming touches may be added to a frame building by the use of field stone for porch pillars or entrances. Field stone must be set by competent men, however, who understand fitting it together and properly pointing it up. While more expensive, some interesting picturesque effects may be gained by splitting the stone, giving the wealth of color which never fades and seldom needs cleaning.

The most modern of building materials and one which seems destined to become almost universal in the course of a few years is concrete. Cement blocks for various reasons have never been very popular. They absorb dampness too easily and are but a very cheap imitation of stone. They look like a sham on their face and no block has ever been made which can overcome this defect.

Cement, however, is gradually adapting itself to the needs of the builder. The "rough cast" finish of our forefathers is now called "cement stucco" and makes an exceedingly attractive finish. On cheap houses it is applied direct to metal lath, which is nailed to the studding. The stucco is first thoroughly waterproofed with a compound then tinted to the desired color. It is durable and economical. Many old wooden buildings can be rejuvenated by this process. In remodeling farm houses it is a type of construction which should be carefully considered, as the wire lath and the cement are fireproof.

The point has been reached, architects tell us, where residences costing from \$5,000 up can be built of fireproof materials practically as cheap as wooden buildings can be erected, especially when one considers the cost of painting and repairs of the latter. Concrete is not yet perfected to a point where for residences it can be plastered on the inside and out and kept dry. Studding of some kind must usually be employed on the inside to form an air chamber to absorb the dampness.

If you contemplate spending more than \$5,000 and especially if you can afford more than \$10,000 for a home, see to it that you have a permanent fireproof residence built for your use. It will pay in the long run and will be a much better investment. Hollow tile are being extensively used at the present time. These can be plastered on the inside and out, are easily laid up, are fire and verminproof and last indefinitely. There is a great variety of materials which can be used for roofing purposes which are practically indestructible.

Securing a good, comfortable home, however, does not depend so much on the material used as upon seeing to it that the stuff you do use is of a first-class grade and that it is properly set in place.

Realize that in starting out to build a home you have taken on the most serious problem yet attacked in life. There are many intricate features which you will have to study diligently if you are to get good results. There will be great enjoyment, however, in the study and execution of plans dealing with the erection of a new home and once the home is finished and occupied there will be experienced a pure delight unequaled by any other effort in life.

---



## The Selection of a Lot

By E. G. GILBERT

**I**N AN undertaking as important as the selection of a lot for a home, there ought to be considered a number of advantages or disadvantages which might make the future home a place to be cherished and kept not only for the sentiment surrounding its selection and development, or a place which never would meet the requirements of a home site, and that would be in a locality and have surroundings that would never permit of its sale if one found too late that he had made a mistake.

In selecting a lot do not be in too much of a hurry to close with the first real estate man whose talks and suavity may have been planned to quickly capture the confidence and pocketbook of the unsuspecting inquirer for a home site. Decide first upon the approximate location, that is, the section, which in your judgment, promises to be most exclusively a residential district—freest from encroachment of business—the favorable side of an adjoining city, as the prevailing winds have much to do with freedom from dirt and odors that are a part of all cities—the place that will be most convenient for the part of the family that will be required to go back and forth; schools are also to be considered, if not for your own children, for the children of the family to whom you might seek to sell in case circumstances or business should necessitate a change of locality; so make a selection of a section where the class of pupils are apt to be congenial and from the kind of families socially that you would be willing to have associate with your children.

After deciding upon a section of the city or suburb there are many other considerations that should be carefully weighed; churches, car service and rate of fare if a suburban locality is chosen, must not be overlooked, especially car service as it is most essential that that be good, and even some lines of the same company are much better than others, both in arrangement of schedule and class of people patronizing them. It is preferable for obvious reasons to be on a line not principally patronized by the laboring class from shops, foundries, mills, etc., as those men necessarily have to go and come in their working apparel and cannot always be most presentable in crowded cars.

It is not always best either to choose in a selected district the cheapest lot on the cheapest street, as the cost of the lot is ordinarily only a small proportion of the total investment in the completed home, and a few hundred dollars difference in the initial cost of the lot should not be of much moment when the desirability of a good location on a good thoroughfare is considered, inasmuch as the house will cost just as much in one place as in another.

In cities or suburbs of cities improvements such as water, sewer and sidewalks are absolutely essential and should either be there or arrangements made that satisfy you



that they will be there by the time you are ready to build. Often times allotment dealers who are marketing a new property where water and sewer are not installed can satisfy a prospective customer by having him interview city or village authorities and learning that the necessary legislation has been approved and that they will be installed in a given time, or by giving a surety company's bond that their promise will be fulfilled without cost to purchasers if they have an agreement to install them themselves.

Electricity and phones are now so nearly universal that they hardly need be considered, although gas is a commodity so desirable that one must decide whether or not it can be dispensed with if it is not available. Butt lots or lots on side streets adjoining corner lots are not as a general thing good purchases unless the corner is already improved or properly restricted. This brings us to the most important subject of restrictions or lack of them:

Restrictions have been the making or unmaking of many a community and the more rigid or strict they are the better it is for any street or settlement and for the individual holder. These restrictions should cover the cost of the house to be constructed—the distance from the front and side lines of the lot, to insure character and location of buildings.

This restriction should be very definite and specify that the house line should not be less than so many feet, and not porch line, as by the latter two properties are apt to be ruined if someone builds a house and undercuts a porch thus allowing the house to be up in line with the rest of the porches on the street and ten or fifteen feet ahead of all the other houses. In this kind of a restriction porches are usually allowed a reasonable width, say ten or twelve feet, and if a wider porch is desired the house will have to be set further back. The height of the grade or ashlar line above the sidewalk should be specified to insure the lawns all being on same level or grade. Fences should be kept from front half of lots at least from the part in front of the house.

High grade properties usually restrict against apartments, terraces and two or more family houses as the character of a street is not so good where the tenants are transients and are constantly moving in and out; against business or the sale of liquors or the use of the property for pleasure or amusement parks. In purchasing in new subdivisions every purchaser should know what restrictions are to cover the whole allotment and ascertain the locations, if there are any, which are available for business purposes, as it is not beyond some unscrupulous dealers to restrict lot by lot and when the subdivision is partly sold out dispose of the remainder of their holdings with no restrictions whatever. Other restrictions are sometimes imposed and in the long run it is short sighted policy for the purchaser of a home site to object to the rigid character of these as they all tend not only to improve the surroundings of one's permanent home but to increase it in value.

Keep away from lots near mills, factories, shops, saloons, stables, blacksmith shops, cemeteries, sanitariums, medical colleges, undertaking establishments, etc. These may not be objectionable to you but they surely effect the sale of your place and lessen the chance of ever getting your money back in case of a desire to dispose of it. It is much better to deal with some reputable allotment company than an individual as their purpose is to dispose of their property and they are therefore better prepared to extend more desirable terms than most private parties would be. Reliable companies, also, in business to stay are more interested that the surroundings be kept first-class

---

and that their property receive the advantages of all civic improvements such as parkways, boulevards, pavements, libraries, schools, etc.

The title of property should be without flaw or encumbrance and unless you are familiar with abstracts and conveyances, it is often money well spent to employ someone who is conversant with titles to look over papers offered you for your hard earned money. Usually a good lot can be bought on 20 per cent. down and 20 per cent. per year, thus allowing four years to pay for it; interest should not be more than 6 per cent. on the deferred payments.

Many companies, in the interest of the streets they are opening, have arrangements whereby, when a lot is paid for, they will furnish on a 6 per cent. basis, money enough to build a house. This is often advantageous as the interest and taxes on a home complete are generally less than rent and the difference applies on the reduction of the principal. With payments at the rate of 1 per cent. a month on the amount loaned, half of the payment immediately applies on the loan and as the months go by the interest becomes less and less and more applies on the loan.

The publishers of this book can refer prospective home owners in many locations to several reliable companies who are willing to enter into such contracts for the financing and erecting of houses on lots that are clear.

Study the real estate ads—study the property and its surroundings—make inquiries regarding the reliability and general fairness of the company offering the property and select the lot that you are sure will longest and best suit your needs and be a homey home site. If you have done this it will always be marketable in case your circumstances, business or something else demands a change of locality.



No. 165 as built in Ohio. For floor plans see page 280.





## Building the Inexpensive Home

By JOHN HENRY NEWSON

**I**NEXPENSIVE homes are the order of the day. Without doubt, a very large majority of the houses now built range in cost between \$1,000 and \$4,000. Not much of a house can be built nowadays for permanent occupancy for less than \$1,000. A very comfortable home indeed can be provided for \$4,000.

By the term "inexpensive home" no reference is made to the "inexpensive" house costing \$25,000 or the one costing \$10,000 or even \$5,000, for many of the statements herein will not apply to houses costing those amounts. What we do refer to is the house costing from \$2,000 to \$3,000, depending on local conditions, and which can be built in most localities for about \$2,500. From the outset it is evident that one must practise the greatest economy in planning and building, as well as in the choice of materials and equipment, to build a house which will meet the requirements of the average family within an appropriation of \$2,500.

The general design is important. The plan should approximate a square in general outline and there should be as few breaks in the exterior as possible. Roof lines should be simple with no dormers or complicated roof construction, a source of expense, not only in building but in maintenance.

Lumber comes in certain lengths and sizes and the dimensions of rooms should necessarily be governed by these lengths and sizes to avoid waste of material. That is why the inexpensive house is usually 24 feet wide and from 24 to 28 feet deep.

To realize the greatest economy every inch of space inside the walls should be utilized. It is the architect's part in planning an inexpensive home to see that it is so designed that materials will work to best advantage. Care should be taken to see that the design gives the greatest amount of livable room in the most limited floor area.

It is not always the size of a room, but the manner in which doors and windows and other openings are laid out which makes a room convenient and livable. No matter how large a room may be, if wall space for the necessary articles of furniture is not provided, the room will not be livable. This applies equally to all rooms throughout the house. Every room should be studied carefully, keeping assiduously in mind the purpose for which it is to be used. Be careful, however, that you do not insist on your



A BUNGALOW TYPE  
No. 165. For floor plans see page 280

architect planning for your individual requirements entirely. A house designed to meet the requirements of the *average* family will sell to better advantage than a special design, should you desire to dispose of it.

Do not be fearful that an artistic design will necessarily increase the cost. Lines are what count in architecture, particularly in regard to the impression one receives of the outside of a dwelling. The day of the house planned by the head carpenter is past and artistic merit in the design is now as much appreciated in the \$2,500 dwelling as it is in the palatial residence costing \$50,000.

There seems to exist a fallacy that it costs more to build an artistic house than a commonplace one. In the hands of a skillful designer this is decidedly not true. If your architect knows his business and knows how to use stock materials, in a competent manner, an artistic home built from his design will cost less than the most inartistic house ever built by rule of thumb.

In referring to *stock* designs and materials do not get the impression that they are necessarily *poor* designs and materials. Factories, in turning out their commodities usually follow set rules. Windows and doors are made in what are called stock designs and sizes, because those designs and sizes are the ones most in demand. They are turned out by the thousands and can consequently be made much more economically than when special designs are ordered, which have to be turned out in individual lots. Machinery has to be reset and perhaps the whole working plan of a factory readjusted to get out special orders. That is the reason why so-called *stock* designs are more economical than *special* designs.

The reason that stock designs for windows, doors, trimming, etc., should be used in an inexpensive house is on account of their comparative cheapness. The point is, however, that it is in the artistic use of these stock materials that the experienced architect excels.

Having selected your plan the next thing to consider is the materials to be used. Be impressed with the fact that the initial work on a home should be done in a thorough manner. Fancy decorations and additions can be looked after later but the question of structural work once settled is very difficult to readjust.

As a rule, unless excavation is very difficult, it is about as cheap to have a basement under the entire house as a part of it. Footings of stone, brick or concrete should be placed under all the walls. Basement walls should be made of whatever material is commonly used in the locality where the house is built. Stone, brick, hollow tile, salt



AN ARTISTIC INEXPENSIVE HOME  
No. 105. For floor plans see page 220



glazed tile, concrete blocks or poured concrete are all good and the cost should determine the selection. The cellar floor should be cemented, the walls waterproofed and proper provision for drainage made. Nothing is worse than a wet cellar. The exposed faces of walls and chimneys are usually constructed of a medium grade of face brick or dressed stone.

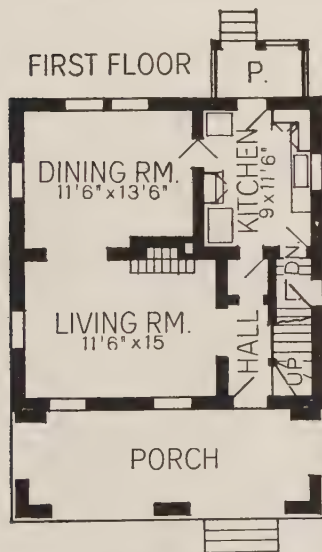
The rough lumber in the house, known to the trade as bill-stuff, consisting of joists, studding, sheathing, etc., is usually delivered in one lot. The siding, shingles and outside trim come a little later. The balance, including inside trim, sash and doors are the last upon the scene. All should be of the kind and quality of wood commonly used for that purpose in the locality where the house is being constructed. One cannot, in a \$2,500 house use lumber which has been shipped a long way of which two-thirds of the cost represents freight charges. Sash and doors should be in stock designs. The cost of a specially designed door is about three times that of a stock door of the same material.

Hardwood floors should be used if the cost is not prohibitive, as they are in every way preferable to soft wood floors. Hardwood trim should be used in the main rooms. Bedrooms and kitchen may be finished in cheaper woods. All trimming materials should be of stock design.

Varnish is the cheapest finish for hardwood trim and floors, though wax gives a more artistic effect and white enamel is preferable for bedrooms and bath. Use a standard grade of varnish, made by a thoroughly reputable firm. It will pay in the end. For the same reason use standard makes of finishing hardware and other accessories. Cheap furnishings are an endless annoyance.



A SQUARE INEXPENSIVE HOME  
No. 186. For floor plans see page 215



"A SQUARE IN OUTLINE"  
No. 164. For exterior see page 194

It is claimed that no prepared paint was ever as good as pure white lead and oil, mixed on the job and applied as soon as possible after being mixed. Therefore, use white lead and oil on the exterior of the house. If shingles are used on the roof, dip them in a standard make of stain before they are laid. Slate is a little more expensive than shingles but has many advantages, and the best makes and grades of tin make a very satisfactory roof.

Plaster made of a proper mixture of hydrated lime, sand and hair, has advantages over the so-called "patent" plasters.

The merits of the various systems of heating—hot air, hot water, vapor or steam, are set forth elsewhere in this book. As a rule the more expensive systems make up the extra cost of installation in economy of operation. Plumbing fixtures can be either enameled iron, vitreous china or porcelain. Each has its advantages and all are good. A good hot water heater is a necessity and should be of a size to furnish a supply of hot water at all times.

If the appropriation will permit, consider the advantages of a tiled floor in the bathroom. It will more than compensate for its additional cost. A tiled floor with Keene's Cement wainscot makes a very attractive bathroom.

Remember that built-in furniture is expensive, as a rule, compared with that bought at the furniture stores. Kitchen and pantry cupboards, linen closets and other fixtures may be profitably built in as permanent features. A built-in kitchen cabinet will save many steps, and space for a refrigerator should be provided in a separate cold room, if possible.

The entire house should be wired for electricity; a liberal number of base plugs for portable lights are a great convenience.

In a most climates weather strips on doors and windows will save their cost, in fuel, in a few years. All door and window openings should be screened.

Having completed your plans and selected your material the next thing to consider is how to get the house built for the least money and at the same time have it "built right."

On a small house the best plan usually is to let the entire job to one responsible contractor, though sometimes a slight saving is effected by letting some of the trades, such as plumbing and heating separately. If you are reasonably familiar with building, money may be saved by buying the material yourself and hiring the labor by the day. This is not recommended to the novice in building.

A method common in some sections of the country is what is called the "percentage system." For a certain percentage on the cost of all material and labor involved, the contractor agrees to look after the entire furnishing of material and labor and superintending the job. A penalty is charged against his commission in case the total cost runs over his estimate. If the total cost is under his estimate he receives a premium. Although somewhat difficult to explain, this system sometimes effects a saving to the home builder.

It is not necessary, as a rule, to employ an architect to superintend the erection of an inexpensive home, if your contractor is working from plans which have been properly prepared. With good plans and a competent, honest contractor, a little common sense is about all that is necessary to look after the work and see that it is being done properly.

Work *with* your contractor and not *against* him. As a rule, he is as anxious to build you a good house as you are to have him. His mistakes are usually due to poorly prepared plans and ambiguous specifications and not to any desire to do poor work.

There is probably no operation in your life, which needs so much careful consideration as that of building your home. Building is becoming a more complicated task every year. A couple of decades ago all that was necessary was to build a shell and then buy a stove and a tin bath tub. In the modern home more conveniences are demanded. To secure the best results will depend very largely upon the care and consideration you yourself exercise in superintending the entire operation.

In conclusion: Be sure that the design meets your requirements—have the plan prepared by a competent architect—use local materials, in stock designs and in the best grades you can afford—employ a good contractor—see that he builds according to the plans and specifications—and your home will be not only a credit to your architect, and your contractor, but most important of all, a source of pride and endless satisfaction to yourself.





By W. R. CREER

President of the Cleveland Savings and Loan Company

**I**F YOU are possessed of the home building idea, and have the necessary funds to make real and tangible your home plan, this article is not intended for you.

The most of us are so situated in life, financially, that if we wait until we have sufficient funds to build a home, and can spare that from our business enterprises, it will mean that we shall only realize our dream of home in the autumn days of life.

This is intended to be helpful to those who must borrow money in order to create a home.

We will assume that you have carefully gone into the question of the selection of a lot, and after due inquiry and investigation have purchased same.

Also, that you have given your pet ideas of what constitutes an ideal home to Mr. Newson, and these have been worked into a practical plan, convenient and "homey" as to interior, and neat, and attractive as to the particular style of exterior architecture which you prefer.

Your home should express your individuality.

Now comes the question, "Where to get the money" in order to supplement your resources and create your home, upon a plan easily repaid and as liberal an amount as possible.

It often happens that the pivotal point in building a home is not who will furnish material but where the money will come from.

As banks are the holders of the loanable funds of a community to a great extent, and as these banks are organized under different charters and for different purposes, it is well to study the functions of the various financial institutions, in order to ascertain which one is best calculated to help you.

It is at once apparent that the institution which meets this need must be empowered under its charter to loan upon mortgage security.

The National Bank, therefore, ceases to be a factor in this question, as, under the National Banking act the loaning on mortgages is not contemplated.

State Banks and Trust Companies make mortgage loans but are limited by law to the amount of their assets that can be placed in this form of security, and are also limited to what proportion of the value of the property offered as security, they may loan.

Generally banks of this kind prefer to loan on houses already constructed, but you are interested in finding a company who will make a building loan, advancing the money as the building progresses.

This brings us to consider the Building & Loan Company or the Savings Associations, as they are sometimes called. These companies are organized for the specific purpose of making loans to create new buildings and invest their entire resources in mortgage loans and preferably upon new homes.

This is the only form of financial corporation which loans all of its funds, all of the time, to assist in building homes.

Many people have the mistaken idea that the Building & Loan Company is for the benefit of the workingman only, and only engages in making loans for low-priced homes. This is a mistake. It assists people in almost every walk of life in home building.

The merchant, lawyer, physician, teacher, etc., etc., get any sum according to the rules of the loaning company upon proper security to accomplish their desire. These companies are one of the most helpful agencies in the growth of a town or city, promoting thrift on the part of its citizens and furnishing the means for building and beautifying the community with suitable homes.

Naturally, the plan of loan and rate of interest differ somewhat according to the locality. We submit, however, for your consideration the plan of a popular Company in the City of Cleveland, which has loaned to build hundreds of homes ranging in cost from \$1,500 to \$20,000 each.

The Company will loan two-thirds of the cost of the house and lot. Thus, you only need to have one-third of the price of your contemplated home in order to begin building.

Thus, if you own a lot worth \$2,000 and your house, to be, will cost \$4,000, the Company would loan the entire cost of the building. If the house is to cost \$5,500, the Company would loan you \$5,000. In the latter case your contribution to the proposition would be the lot and \$500 in cash.

So much for the initial financing, now as to rate: Take the loan of \$4,000 for instance.

The Company requires a monthly payment of \$40 each month which covers both interest and principal. The rate of interest is 7 per cent. until the principal is reduced to \$3,000 then the rate is reduced to 6 per cent., and when again reduced to \$1,000 the interest rate will be 5 per cent. for the balance of the loan.

The psychology of the installment loan is,—that it takes the rent paying habit and uses it to pay off the mortgage. You only invest one-third in your home proposition, and then pay rent (the monthly installment) to yourself until the home is free from debt.

When you make a loan to a bank it is usually written for a year. Any time after one year the bank may ask you to repay the loan in full. If you loan from a private individual for, say, three or five years, it is regarded as an investment by the lender and he does not wish to accept any payment on account of principal until the end of the period—a plan which tends to keep one in debt.

Under the plan of the Savings & Loan Company you pay the same as rent, in no larger amount, and no oftener. So long as you keep up your payments the Company cannot ask or exact another dollar from you, nor change the rate of interest, yet should you so desire you can make larger or additional payments at your option, and at any time after one year pay off the loan in full.

Home building is character making—it provokes patriotism and produces good citizens. While we dream dreams of the hereafter, let us make practical and positive a home here below around whose hearthstone shall spring and develop all the domestic virtues.

In the hope that the above suggestions may help in the financing of the home beautiful the above has been penned.





## The Building of an Artistic Home

By Permission of Paine Lumber Co., Ltd.

**F**ROM the age of the cave-dweller to the present day the degree of culture of the times has been chiefly apparent in the building of the home.

The crude cave of the primitive man was as indicative of his coarse and rude nature as the artistically appointed home of today is an evidence of the order, propriety and culture of the higher type of society.

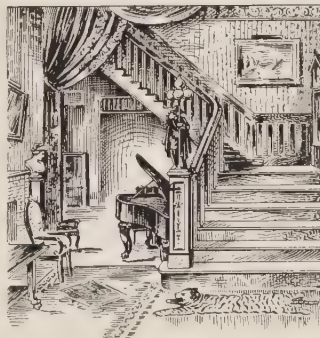
In primeval ages, when the home was nothing but a cave, a simple barricade was

erected to keep out the elements and wild beasts, but as the centuries passed and civilization overspread the earth, the home began to mean more to the owner than simply a place of refuge and protection. The simple barricade of the early ages, in the eyes of the present day home builder, does not suffice any more than do the caves, shelters and hovels of former times. Both pride and



comfort had their effect, and then beauty combined with serviceability took the place of the makeshift.

In planning an artistic, modern home, the first requisite is a foundation of natural good taste together with the touch of the master hand educated along many lines—not the suggestions of the cozy corner editor of a magazine, but the careful, well-studied plan of an expert, who has spent years in obtaining this knowledge, one who has a wealth of ideas at his command.



The most beautiful home can be marred by inexperience or poor judgment in the selection of suitable and appropriate doors. We are showing in this article and elsewhere in the book, several different styles and designs of doors that will add beauty to any home. As much care and judgment should be used of

the selection of the proper style of doors as is used in the selection of furniture, for doors are as conspicuous and are really a part of the furnishings.



TYPICAL ART CRAFT ENTRANCE  
Flush Inlaid Selected Birch  
Courtesy Paine Lumber Co., Ltd.  
Oshkosh, Wis.

When you select doors substantially made and correctly designed, you create an effect that makes a favorable impression. It is said that first impressions are lasting and for that reason, special attention should be given in selecting suitable door designs for the front entrance of the home. The door should be pleasing to the eye, well proportioned, and well built and so hung that the opening and shutting of it is a real pleasure. It should be protected by varnish and paint from the wear and weather.

### ONE PANEL DOOR

This one panel door, No. 402, can be used in perfect harmony with most any style of home, and is one of the most desirable designs that can be selected. It is plain, practical, easy to keep clean, and has all of the good qualities that go to make it a very desirable door.

This door is especially attractive in rotary cut birch as the large unbroken expanse of panel gives an exceptional opportunity to show the large beautiful grain of this wood.



**KORELOCK**

DESIGN NO. 402  
Birch

Courtesy Paine Lumber Co., Ltd.  
Oshkosh, Wis.



## COLONIAL

There is a grandeur and air of refinement about the Colonial style of home that cannot be found in any other. A Colonial Home can be small and inexpensive and be just as attractive and "homey" as one built along more expensive lines. The one panel door, No. 402, shown on opposite page, should be used for interior doors, and the same door made with a heavy mould is recommended for the exterior doors.

For all styles of homes French doors add very much to their attractiveness. The design, No. 491, shown on this page, is made to match the No. 402 door and makes a particularly attractive combination.



COLONIAL

**KORELOCK**

DESIGN No. 491—BIRCH

Courtesy Paine Lumber Co., Ltd.  
Oshkosh, Wis.

## BUNGALOW

The Bungalow age is here. Encyclopedias say, Bungalow means a Bengalese house, that is, a house built like those in India, but to the modern home builder, it means home that suggests comfort, and hospitality at a moderate cost.

Bungalow and Craftsman styles are very closely allied and there is no limit to the attractiveness that can be attained by the careful selection of stains, decorations and style of doors.

The design, No. 471, shown on this page, has been selected from a large variety of designs shown in a prominent door manufacturer's catalogue, as being one that will harmonize well with either Bungalow or Craftsman styles. The interior door, No. 462, to be used with this design is shown elsewhere in this book.

(Editor's Note) The manufacturers of these doors will be glad to send their large Gold Medal Catalogue free showing hundreds of beautiful designs.



CRAFTSMAN

**KORELOCK**

DESIGN No. 471—BIRCH

Courtesy Paine Lumber Co., Ltd.,  
Oshkosh, Wis.



Interior views of one house that is finished throughout with Birch Doors and Woodwork at an increased cost over soft wood of only about \$50.00 and increased in value at least \$200.  
Courtesy PAINE LUMBER CO., LTD., Oshkosh, Wis.



## The Increased Value of the Home

Where Birch Doors and Trim are Used

**T**HE aim of every home builder is to have the interior of his home rich, beautiful and harmonious at as small an expense as possible. Few people realize the beauty, durability and economy to be gained by using birch, which is rapidly becoming the most popular wood for doors and woodwork owing to its natural beauty of grain, smoothness and excellent staining qualities.

The use of birch doors and woodwork is equally desirable for homes of all character and is by no means restricted to those of the bungalow type. We have used this style for comparative purpose only, because at the present time home builders of moderate



Courtesy Paine Lumber Co., Ltd., Oshkosh, Wis.

means seem to prefer homes built along these lines. Realizing that our readers want facts and not theories, we have figured the relative cost of finishing the house shown on this and opposite page, finished in soft wood and finished in birch. The difference in cost will not exceed \$50.00, while the value is increased at least \$200.00.

Therefore, are we not right when we say, "Refuse to sacrifice the beauty of your home for a few dollars in economy in first cost of soft wood doors and woodwork?"

The Living Room of this house—the heart center of the home, where the family gathers—is finished with birch doors and mill work, stained mission. The birch costing about \$10.00 more than soft wood.

Dining Room—This room of all others, indicates the character of the home, and can only be shown at its best when finished with birch doors and woodwork, which can be stained Early English, golden, fumed, or any desired finish.

Kitchen—Can anything be more indicative of cleanliness in the kitchen and pantry than white enamel. White enamel can best be recommended when applied to birch; its surface being hard and light in color. It is in fact the ideal wood for this kind of finish.

By using birch throughout the first floor of this house, the cost has been increased only about \$25.00 and the value increased at least \$100.00.

Bedrooms—White enamel woodwork and mahogany doors, have long been acknowledged to be the ideal sleeping room finish, and how peculiarly well adapted is birch to both. Doors—Birch, the American Mahogany. Woodwork—Birch, the ideal wood for enamel.



## The Importance and Influence of Hardwood Floors

**H**OME building is usually a decidedly new experience and one involving many details. The average person builds but one home and it is nothing but natural that the building of this home receive very serious consideration. As a rule it does receive plenty of consideration, although many important items are often forgotten or not sufficiently investigated.

Probably no one enters strange quarters without "watching their step." You instinctively look to your footing just as naturally as opening your eyes upon awakening in the morning. You may admire other decorations immensely, but your eyes are forever traveling back to the floor. The floors are the very foundation of a room's artistic possibilities. You can make or mar an interior with the floor.



Interior of Residence of S. O. Richardson, Toledo, Ohio

Anything so long as it is a floor seems to be good enough for some. They are quite particular about other things, but if the flooring material appears of a reasonably good quality, floor worries seem to end right there. Those who are just a bit more

particular specify what is known as kiln-dried flooring which may be bought at any lumber yard. But when such material has been subjected to the first winter's heat, it is likely to shrink and open the joints, causing cracks to appear which are so unsightly a feature to some floors. The material that is really worth the trouble and price is wood-mosaic hardwood flooring. The woods must be carefully selected and thoroughly seasoned. There should be no difference in the appearance of the floor one, five or ten years after its installation than when originally laid, providing, of course, proper treatment has been accorded it.





Interior of Residence of H. S. Reeside, Washington, D. C.

Parquetry borders are made up in 12 foot lengths and parquetry fields in convenient sized slabs for laying. Wood-carpet designs, when they are made of oak slats, usually  $1\frac{1}{3}$  inches or 2 inches in width, are assembled in squares, hexagons or rhombs, for convenience in laying, but when thick ( $\frac{1}{2}$ -inch,  $\frac{5}{8}$ -inch or  $\frac{13}{16}$ -inch) they are laid in separate tongue-and-groove pieces 2 inches or  $2\frac{1}{2}$  inches wide. Herringbone designs are laid in separate pieces, whether thick or thin.

Coming back to the beauty of hardwood flooring, there is yet to be found a person who would not prefer them if given the choice. If you wish to prove the statement let anyone ask if you were ever in a truly pretentious home without its hardwood floors. It is possible to concoct hundreds of parquet combinations so that virtually every taste or whim may be gratified. The range of possibilities is practically unlimited.

In this world-wide movement of sanitation, it should be remembered that one of the greatest germ collecting agents is a floor full of unsightly cracks which cannot help but fill with dirt, germs and disease.

Carpets are fast becoming obsolete. However scrupulously clean one may be as a housekeeper, it is an impossibility to prevent disease carrying germs working their way into and through the carpet until there is such an accumulation that any little movement fans them into the very air you breathe. Even the constant use of vacuum

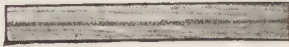
Oak strip flooring, No. 1 standard grade, is carefully selected for color and figure and is free from sap, stain, knots and shakes on face. The usual thicknesses are  $\frac{5}{16}$ -inch square edge; also  $\frac{1}{2}$ -inch,  $\frac{5}{8}$ -inch and  $\frac{13}{16}$ -inch tongue-and-groove, in average length of about 8 feet.

Tongue-and-groove flooring should be manufactured so that the strips make a tight joint above and below the tongue-and-groove. The object is to avoid the pushing up of the joints, during damp weather, to which undercut lumber yard flooring is liable. Such strips require a little more care in laying and much greater care in manufacture, but the result is worth the slight additional labor and expense.



Library of Mrs. L. C. Meyer, San Francisco, Cal.

PLAIN PARQUETRY BORDERS



601. 3"  
Oak and Mahogany



603. 3"  
Mahogany and Maple



604. 4"  
Oak, Mahogany and Maple



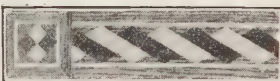
AM. COLONIAL OR GOTHIC, 619. 8"  
Oak, Cherry and Maple



COLONIAL, 609. 6"  
Oak and Mahogany



ENGLISH RENAISSANCE, 606. 6"  
Oak, Mahogany and Maple



ENGLISH RENAISSANCE, 607. 6"  
Oak, Mahogany and Maple



JACOBEOAN, 614. 8"  
Oak and Mahogany



GREEK, 615. 8"  
Oak and Mahogany



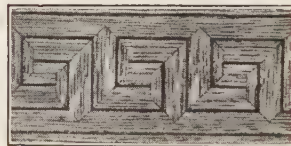
ENGLISH RENAISSANCE, 622. 10"  
Oak, Mahogany and Maple



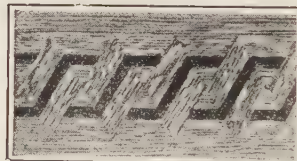
QUEEN ANNE, 620. 10"  
Oak and Walnut



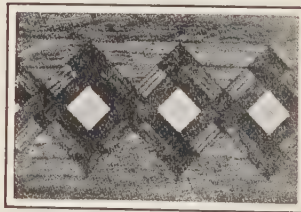
GREEK, 625. 10"  
Oak, Mahogany and Maple



GREEK, 629. 12"  
Oak and Walnut



ADAM OR COLONIAL, 642. 12"  
Oak and Mahogany



ENGLISH RENAISSANCE, 644. 16"  
Oak, Mahogany and Maple



LOUIS XVI, 639. 12"  
Oak, Mahogany and Maple



COLONIAL, 637. 12"  
Oak, Mahogany and Maple



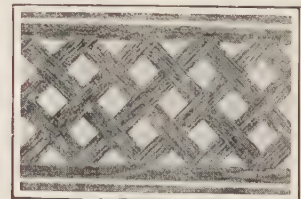
ADAM OR GEORGIAN, 630. 12"  
Oak, Mahogany and Maple



ITALIAN RENAISSANCE, 627. 12"  
Oak and Walnut



GREEK, 641. 12"  
Oak and Mahogany



CHINESE FRET, 645. 16"  
Oak and Maple

WOOD-MOSAIC FLOORING

Courtesy of

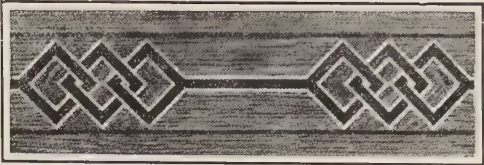
WOOD-MOSAIC CO., INC.



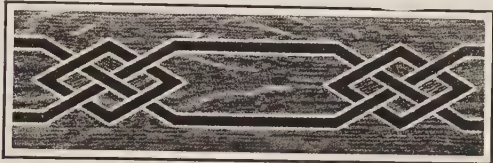
PLAIN PARQUETRY BORDERS



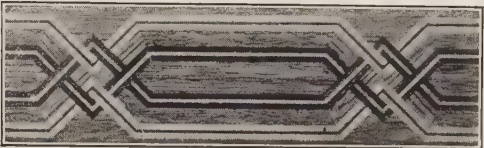
CHINESE CHIPPENDALE. 632. 12"  
Oak and Green Mahajua



CHINESE OR ART NOUVEAU. 640. 12"  
Oak, Maple and English Oak

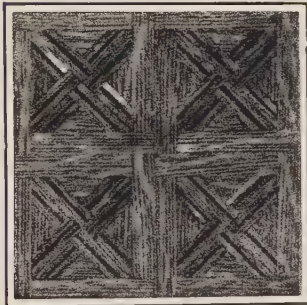


JAPANESE. 635. 12"  
Oak, Mahogany and Maple

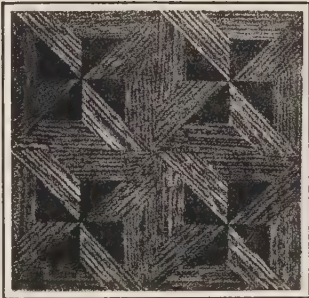


GOthic. 636. 12"  
Oak, Mahogany and Maple

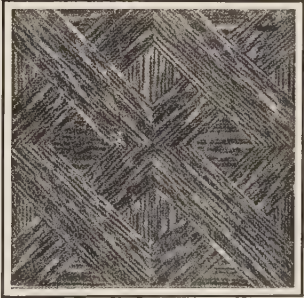
FIELDS



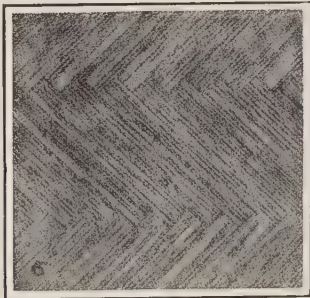
ADAM. 707  
Oak and Walnut  
Parquetry Design



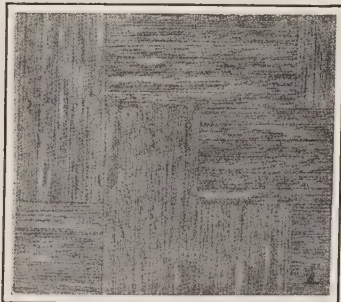
FRENCH RENAISSANCE. 712  
Oak and Dark Oak  
Parquetry Design



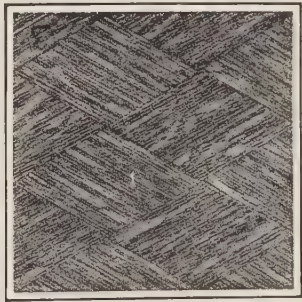
LOUIS XVI. 710. OAK  
Parquetry Design



GOthic. 706. OAK  
(French Herringbone)  
2-in. x 16-in. Separate Strips



QUEEN ANNE. 705. OAK  
8-in. x 16-in. Sections



ROMAN QUARRY. 701. OAK  
8-in. Rhombs or Diamonds

WOOD-MOSAIC FLOORING

Courtesy of

WOOD-MOSAIC CO., INC.

cleaners falls short of eliminating the millions of microbes. Germs, dirt and dust find no resting place in the tightly jointed and polished surface of a parquet floor. Especially important is this feature of sanitation if there are children in the house.

Disregard any other reason or argument for hardwood floors and they are preferable because of their saving in time and labor. The drudgery and heavy sweepings are replaced by a simple wiping of the floor with a brush or an ordinary broom covered with a soft cloth.

You must give wood-mosaic hardwood flooring full credit for its handsomeness. So successfully has it impressed its air of refinement, that you probably consider its cost prohibitive or certainly beyond reason. Of course, a good quality hardwood floor will cost slightly more than materials of a lesser quality.

There are many things to be taken into consideration as to what makes up the slight additional expense. From the standpoint of investment, the value of the property is increased many times over the cost of the floors. Their installation represents an investment in satisfaction as permanent as the building itself. The cost will compare very closely, when laid and finished, with the price of a good carpet. The size of the room, style of border, pattern of floor, of course, affect the price the same as when buying a carpet.

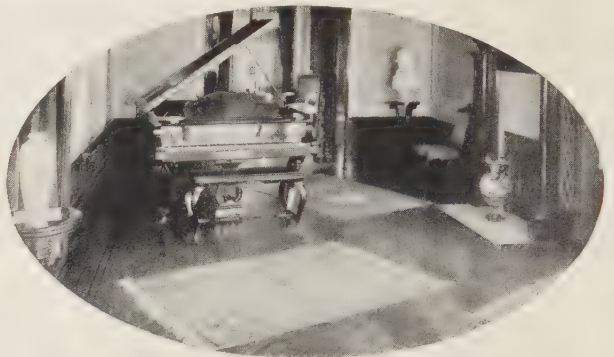
Plans for a new house are not complete unless provision has been made for hardwood floors. The total cost of the home is of little consequence, for the home that is a home at all is worthy of parquet floors.



Interior of Residence of Charles C. Coyle, New Haven, Conn.

Decision as to the thickness of flooring should be decided upon before building operations are begun, so that the sub-floors can be placed at the proper level. There is a flooring measuring only  $\frac{5}{16}$  of an inch thick which is really the most economical of all. It is this thickness that is used so extensively in completed houses. Therefore, you can see the matter of parquet flooring is for the very deep and serious consideration of the new home builder, or those who wish to improve the appearance of their present house.

A few reproductions of interiors of moderately priced homes are shown in connection with this article.



Interior of Residence of Joseph Dunfee, Syracuse, N. Y.





## A Word of Precaution About Your Roof

**I**N no other field of building material is it necessary to exercise so much caution in choosing right, as in the matter of roofing.

Likewise, in no other field is the right choice so vitally important.

There are buildings without foundations; buildings even without walls. But a house without a roof is unthinkable.

At the same time a mistake in the selection of your roofing is not apt to make itself felt until a year or more.



This slate roof lasts as long as, and longer than the house.

Nor are the consequences confined to the roof.

The damages from leaks or repairs may extend from cellar to garret. They may include cracked walls, peeling ceilings, damaged decorations, ruined clothes, spoiled furniture, etc.

They always include a fair-sized puncture in your bank account.

What adds to the complication of the roofing question is the exceptional number of various roofings offered to the public and pushed aggressively by their makers.

Just to show some of the tactics:—one maker claims in his literature, that his roofing needs no annual repairs. This is true. But he doesn't say anything about the necessity of coating his roofing every two years—a fact that appears later (generally after the purchase has been made).

If you consider any roofing that requires painting—beware.

Its purchase is a pledge on your part to keep on paying out money for keeping it painted.

According to the published statement of the very manufacturers, these roofings need



Owing to its economy and dignity of appearance slate is frequently used to roof school buildings.

painting every two or three years. In other words, it is not the roofing, but the paint that keeps the weather out.

The roofing merely serves to carry the paint—just like the canvas in a painting.

The multiplicity of roofings is all the more bewildering, because the standard of roofing service has been set so unnecessarily low by the makers of these inferior roofings.



No roof is subjected to more critics than a church roof. That's why slate is preferred.

Some of them guarantee their material for 10 years, some consider it long lived if it lasts 20 years—even though it involves a bill for coating or painting every two years or so. This expense doubles and trebles the original cost of the roof.

It is the same as though the House-owner were to buy two or three roofs for his house, for the cost of the roof is not simply the cost of putting it on, but the total cost of keeping your building sheltered as long as it stands.

Of course such a low standard is unnecessary, if it is possible to find roofing that meets a higher standard.

There is no reason why the roof of a building should not last just as long as its foundation—and that without repairs or protective painting every so often.

There is such a roofing—slate. No one denies that the most substantial, the most

durable of all building materials are certain kinds of stone. That's why they are used for the foundation, and more and more for walls.

Slate is the only stone that is so strong that it can be split into small slabs, no thicker than the cover of a cigar box, without breaking, without crumbling, peeling, decaying or disintegrating in any way.

The reason? Slate, that is good slate, is entirely non-porous—the only non-porous workable stone.

Therefore it does not absorb anything. It is immune to the acids and gases generally found in the atmosphere, and which are so destructive to other materials.

Being non-metallic, it does not rust.

Being stone, it does not burn.

Being non-porous, it requires no coating or painting.

These theoretical claims have been well borne out in practice. It is no exaggeration to say a good slate roof will outlive the building without paint or repairs. It is proven and provable in practice.



A Slate roof is as handsome as it is durable.



There are slate roofs over 100 years old. The writer personally saw slate 70 years old. They had been transferred from a dismantled church to another building and form a roof that looks and is today as good as new.

The "Illustrated Carpenter and Builders' Technical Manual" says:

"The value of roofing material is determined by a variety of considerations, among which the most important are: First cost, durability, appearance, resistance to fire, and consequent influence on cost of insurance and the expense of maintenance and repairs. We think it is safe to state that nothing equals slate. A slate roof, when properly put on, is practically permanent and requires comparatively no repairs or attention."

So slate is the standard roofing because it wears the longest at the least cost, just as gold is the money standard because it is the most valuable commercial mineral.



A Slate roof on a cement house—an ideal combination.



With a Slate roof the first Cost is the only Cost

Another proof that slate is the standard roofing is the way in which makers of artificial roofings refer to it. This is shown by the following extracts from the literature published by these roofing makers:

"..... wears like slate." "..... wears longer than any other except slate," etc.

Slate may be a little higher in purchase price than inferior roofings, but it is much cheaper in cost of service. When you put on a slate roof the first cost is the last cost, the only cost.

When you put on some inferior roofing the purchase cost is indeed only the first cost, to be followed by the cost of repairs, coating, renewing, etc.

These roofings form a very costly answer to the question: "How much does your roof cost you per year of service?" This is the only true test of roof cost—not the price per square.

In considering slate, it is well to remember that slate is a general term, just like lumber. There is poor lumber and good lumber—inferior hemlock and first class oak.

In stipulating slate for your building, insist on a slate that enjoys in slatedom the same reputation that white oak has in the lumberworld.



## Advantages of Good Tin for Roofs Valleys and Gutters

By J. C. KILROY

Of Follansbee Brothers Company

**T**INPLATE has been used for roofing material for so many years that it has been thoroughly tried and tested, and has proved its value as a roof covering. Good roofing-tin—the old time, durable quality—is considered the standard roofing material for the highest class of buildings.

A good tin roof combines advantages that are not found in any other form of roof. It must be understood, however, that these statements apply only to good quality, heavily-coated, well-made tinplate. Tin is the natural covering for roofs. It has qualities possessed by no other metal or substance, which peculiarly fit it for roofing purposes. It is subject to less contraction and expansion than any other metal that can be used; it is adapted to more variations of climate than either copper, zinc or lead; in fact, climatic conditions are rarely a bar to its use. Only some local conditions peculiar to the building itself render its use impracticable. Its pliability, lightness, durability, cheapness and the various climatic and other changes to which it is adapted, render its use a most natural one.

A GOOD TIN ROOF IS LIGHT IN WEIGHT; it requires only a very light roof construction, which is in itself a very marked saving in the cost of any building. Slate, tile and tar roofs are very heavy, as the following table of weights of roofing materials will show:

### Weight per Square (100 Square Feet)

Tile (shingle) . . . . .	1200 to 1800 lbs.
Tile (Spanish) . . . . .	800 to 850 lbs.
Slate, $\frac{3}{16}$ -inch, good grade . . . . .	650 to 700 lbs.
Four-Ply Slag . . . . .	525 to 575 lbs.
Three-Ply Slag . . . . .	350 to 450 lbs.
Shingles, spruce and pine . . . . .	400 lbs.
Tin, 16 thickness, standing seam . . . . .	65 lbs.

A TIN ROOF IS PERFECTLY CLEAN: this is an important feature where the water from the roof is collected in cisterns. There is nothing injurious in the tin roof provided the paint used on it is harmless. Cistern-water from a tin roof is pure, clean and tasteless.



A TIN ROOF IS NEAT IN APPEARANCE. Where laid with standing seams the effect is attractive, particularly where the crest of the roof is finished off with some simple design. Tin looks infinitely better than any prepared or composition roof.

A TIN ROOF IS EASILY PUT ON; is adaptable to any surface, from a flat deck to a vertical wall. Note that tile, shingles, slate, etc., are only adapted to very steep slopes, and that tar-and-gravel and similar roofings must be laid flat, or they will melt and run, or "creep" in hot weather.

IF A TIN ROOF IS DAMAGED IT CAN BE REPAIRED QUICKLY AND CHEAPLY. There is no wholesale tearing up of the roof, as in the case of tar-and-gravel and composition roofings, to find the leak. A roofer can repair the leak in a tin roof permanently in a few minutes.

TIN IS NOT AFFECTED BY HEAT OR COLD: it is equally popular in the Northwestern regions and in the Southern States.

A GOOD TIN ROOF IS THE MOST WEATHERPROOF FORM OF ROOFING that can be had at any cost. Wind and snow cannot sift through it, as with shingles, slate and tile. Heavy rain and moisture cannot get through it, as it covers the upper surface of the roof with an unbroken, continuous sheet of metal.

A TIN ROOF IS THE BEST KNOWN PROTECTION AGAINST FIRE, excepting only reinforced concrete or hollow tile. Tests and actual experience in conflagrations have proved that the tin-covered wooden fire door is the most effective bar to flames. Such doors have been adopted as the highest standard by the National Fire Protection Association. A tin roof gives the same protection to the upper part of the building. The wood may even char slightly under the tin in extreme cases where the heat is intense, but the fire cannot penetrate the unbroken sheet of metal.

Slate and tile roofs, whether laid on wood or on metal roof framing, will crack and fall when exposed to heat, laying bare the sheathing and the interior of the building, and rendering the work of firemen below extremely hazardous. Tar-and-gravel roofs, and similar built-up composition roofings containing pitch, tar and other bituminous compounds, are the worst fire-risk—excepting shingles—and are usually classed as such by insurance companies.

In case of fire from within the building the tin roof acts as a blanket to the flames, and will often hold together intact when the roof supports burn through and collapse, smothering the flames and preventing the disastrous upward draft which often carries sparks and embers to a distance. This well-known feature of tin roofs is a great aid to firemen in fighting the flames.

EVERYTHING CONSIDERED, IT IS THE MOST DURABLE ROOFING MATERIAL that can be obtained. The roofs of cheap tin that fail to uphold this standard of durability only serve as a contrast to the value of good tin, properly put on.

A GOOD TIN ROOF IS ECONOMICAL—it is an investment rather than an expense. A building covered with a roof that requires no repairs is worth more in buying and selling. The first cost of the tin roof is the only cost excepting the slight additional cost of an occasional coat of paint. The intervals between subsequent paintings are about equal to the average life of a tar and gravel and the various prepared and composition roofs.

Contrasted with other forms of roofing material *a good tin roof is:*

BETTER than slate, which is heavy, cracks in extreme cold weather or under sudden changes of temperature; fades in color, is exceedingly difficult to repair, and can only be laid on steep surfaces.

It is a curious fact that owing to the cheap quality of the nails used nowadays for slate, tile and shingle roofs, this is a weak point of such roofs, since rust soon attacks the nails, and when these rust through there is nothing to hold the heavy slates or tiles. The nails in a tin roof are completely protected from the weather, as the surface of the tin is continuous, without any cracks or interstices through which moisture can penetrate.

BETTER than tiles, which are difficult to lay tight, and admit wind and moisture, and are heavy, requiring extra strong roof construction.

BETTER than shingles which warp, rot out, split, absorb water and remain damp, and in hot, dry weather are easily set afire by a spark. Modern shingles are usually sawed instead of split, as in the old days, and do not last long. Like slate and tile, shingles are only adapted to steep roofs.

BETTER than gravel, slag, or composition roofs, which are made of perishable, inflammable materials. Such roofs are practicable only on very flat surfaces—less than three inches slope to the foot\*—and are a constant menace from fire to the building they cover. Leaks in roofs of this kind are very difficult to trace and repair, as the water will often work for long distances between the courses of paper and felt. Such roofs are dirty and frequently clog the gutters and downspouts with tar and gravel. In case of fire they add fuel to the flames, and render the work of firemen doubly hazardous, from the burning pitch or tar which drips through to the lower floors and from the eaves. The extreme danger from fire with roofs of this class will be realized by noting the amount of highly inflammable material applied to every 10 feet square:

A four-ply TAR-AND-GRAVEL ROOF contains:

Tar . . . . .	120 lbs. per 100 sq. ft.
Felt . . . . .	56 lbs. per 100 sq. ft.

Note further that paper and felt are perishable materials, and that tar and pitch, under the action of heat and cold and the weather, soon dry out, crack, and lose their waterproof value.

BETTER than any ready-made roofing—felts and paper and patent roll roofings, which are at best only temporary coverings, and which bag and buckle and look cheap and poor, and help to feed the flames in case of fire.

BETTER than copper, especially where put on in large expanses, as the great expansion and contraction of this metal under varying temperatures causes it to break apart at the seams. Copper is inclined to "craze" and "creep" under certain conditions.

BETTER than zinc, which disintegrates on exposure to the atmosphere, particularly in salt air, along the seaboard.

BETTER than sheet-lead, which creeps and draws itself out thinner and thinner until it falls apart. Both zinc and lead will melt and run down under moderate heat, in case of fire.

Everyone who has had experience with *good tin* roofs readily acknowledges these facts. The statements and attacks made against tin roofs by makers of other forms of roofing apply only to cheap roofing plates: such arguments and statements are not true of the heavily coated, well-made plates which have always given such excellent all-round satisfaction, where treated right.

\*See Report of Committee on Roofs and Roofings, Annual Meeting, National Fire Protection Association, New York, May 22, 23, 24, 1907.





## Ideal Plastering

**T**HE plastering and finishing of walls is an important part of house building. Although the cost of material and labor in the plastering is only a small part of the cost of the house, yet much of the beauty of the home and the comfort of its occupants depend upon the plastering being well done.

Plaster should deaden the walls of a room so that sound from other rooms will not be readily heard and so that there is no vibration or disagreeable echo from the walls. Everyone appreciates the pleasure of talking in a room where the sounds are softened and where noises from other parts of the house are not so distinctly heard. The wall of the room should also be attractive in appearance. It should be made of material which can be easily decorated and frequently cleaned and which will lend itself as a background to other decorations.



Cluthe Residence, Glen Ridge, New Jersey  
 "Tiger Brand" White Rock Finish used for finishing coat

The ideal material for plastering is old fashioned lump lime plaster,—*provided it is properly used*. This plaster has a porous nature, that is, there are tiny air spaces between the particles of plaster. These air spaces effectually deaden the sound so that it is not carried from one room to another.

Nothing has been found which produces a more satisfactory wall. The objections to this plaster, however, are that it requires great skill to mix it or slake it properly. The lump lime must be soaked for many days to thoroughly slake and to avoid pitting and popping. The labor of doing this work and the necessity of large mortar boxes makes it inconvenient and costly to use this material. The result obtained depends too much on the skill of the laborer who mixes it.

For these reasons architects have feared to use lump lime and in many parts of the country have turned to the use of hard adamant—calcine plaster. This material is very unsatisfactory. Its use, however, has grown because it is cheap and it is easy to wet up and apply. Adamant plaster is hard and brittle so that it easily reflects and transmits sound. It shrinks when setting and is apt to bend and buckle wood lath. When used on metal lath, even though the metal lath is coated, the sulphuric acid in



Residence Mrs. John Hay, Cleveland  
 "Tiger Brand" White Rock Finish used for finishing coat

the plaster will eat it and destroy the metal. Adamant plaster won't stick to concrete walls. This plaster sets very quickly and does not harden at all after the first few weeks. When the plasterer mixes up a lot of it it will harden in the mortar boxes unless it is quickly applied. The droppings cannot be retempered and the waste in using such plaster is a considerable item. Its fire resisting quality is so low that the slightest fire in a room makes it drop off.

Besides the difficulties of applying adamant plaster there are many reasons why it is not suited for fine residence work. The brittle nature of the plaster makes it a sounding board which transmits every noise. Comparing it to lime plaster, it is much like a sheet of steel compared to a wood board. Everyone readily appreciates how disagreeable it would be to live in a room with sheet steel walls and how much more wood walls would deaden and soften sounds.

### HYDRATED LIME

This material gives all the advantages of the old lump lime and at the same time it is as easy to prepare as adamant plaster and costs much less because none is wasted. The work is scientifically done, so that every particle of the lime is thoroughly slaked and there is no danger of pitting or blistering.

The manufacture of hydrated lime requires considerable costly machinery. The lime is first crushed to  $\frac{1}{4}$ -inch size or less so that the water may get at it thoroughly. The mixing of lime and water is done in large steel cylinders; in these the lime and water are mixed so that every particle of lime comes in contact with water. After the lime has become completely hydrated it is passed over screens which separate the lime from any unhydrated cores, lumps or other impurities. Finally the hydrate is ground to an impalpable fineness and then packed in jute sacks weighing 100 pounds, or paper sacks weighing 40 pounds.



This hydrated lime has many advantages for the architect, dealer, plasterer and the owner of the building. It will not spoil no matter how long it is exposed to the air. The quality of the job does not depend in any way upon the laborer's work in mixing because the slaking has already been done. The material can be prepared by soaking over night or even less time, if necessary.



Largest Lime Plant in the World. The Kelley Island Lime & Transport Co.'s  
Plant at White Rock, Ottawa County, Ohio

The mortar for plastering can be prepared as follows for either metal or wood lath:

SCRATCH COAT

1200 lbs. of sand  
600 lbs. hydrated lime  
 $2\frac{1}{2}$  lbs. hair

BROWN COAT

1200 lbs. sand  
300 lbs. hydrated lime  
 $1\frac{3}{4}$  lbs. hair

If two-coat work is done mix as follows:

FIRST COAT

1200 lbs. sand  
400 lbs. hydrated lime  
 $2\frac{1}{2}$  lbs. hair

Where tile or concrete is used as a base, the hair may be left out of the mixture.

This mortar can be mixed on the job or can be mixed at the lime manufacturer's plant or at a regular mixing plant, and then delivered to the job in 100 pound sacks, ready to wet up.

The mixtures thus made set very much quicker than old fashioned lump lime mortar. It makes a stronger plaster and the walls dry out more quickly. This appeals to the plasterer because he can put on his brown coat in shorter time and can mix more sand with it. With the majority of adamant calcine plasters throughout the country two parts of sand to one part of calcine plaster is all that the plaster will carry. With some

of the better classes and fine ground calcine plaster the proportion of sand carried will be a little more than this, but two to one is a fair average of all these plasters.

A two to one mixture of lime for the scratch coat makes a rich mortar and for the brown coat sand can be used in the proportion of four to one. As far as the plasterer is concerned he likes this lime mortar much better than the hard or adamant wall mortar because the lime mortar for one thing spreads very much easier.

On a certain job in Cleveland, plasterers working on the scratch coat with a hydrated lime plaster put on 550 square yards a day; while working on hard adamant plaster they could only put on 400 square yards per man per day of eight hours. This hydrated lime plaster thus costs about 20 per cent. less to apply than adamant plaster.

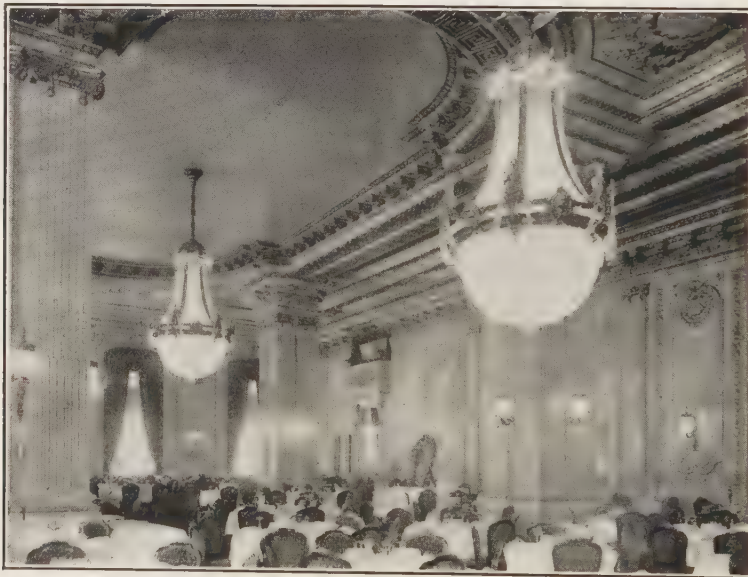
While the hydrated lime mortar will not dry out quite so quickly as adamant plaster, use good ventilation in a warm room and the scratch coat of hydrated lime mortar will dry out in two or three days, so that the brown coat can be applied, and the brown coat will dry in from three to four days so the white coat can be applied.

It is no disadvantage to the plasterer if this length of time is required because he can rotate his work around in the house or building, putting on the brown and white coat when the scratch or brown coat has dried.

It is also an advantage to use hydrated lime because all of the mortar droppings can be retempered and used over. They do not harden at once, as in the case of adamant plaster.

### FINISHING COAT

For applying the finishing coat, that is the white coat, hydrated lime is an ideal material. It is easy to apply, spreads smoothly under the trowel and never shows a pit, pop or blister in its surface. It is well adapted for white finishing or can be used equally well where matt effects or a rough surface is desired.



Interior View—Hotel Rector, New York City  
"Tiger Brand" White Rock Finish used for finishing coat



The lime for this purpose must be even more carefully selected than that for the brown coat and scratch coats. There are a number of limestone deposits from which hydrated lime can be made which will serve well enough for the under coats. There is only one deposit, however, where the limestone is uniform enough to produce a hydrated lime suitable for white coat work. This deposit is found in Ottawa County, Ohio.

Architects and contractors have repeatedly tried hydrated limes from other parts of the country and found them entirely unsuited for white coat work. The varying quality of the stone seems to prevent the complete hydration of the lime and the white coat will pop and blister due to the slaking and swelling of the unhydrated cores in the wall. There is also great difficulty in spreading the mortar made from these other limestone deposits.

There is of course some prejudice in certain parts of the country against hydrated lime for white coat work. This is only natural in view of the unsatisfactory experience with improperly hydrated limes.

If care is taken to select a lime from the so-called White Rock district it will be found as good as the best of the old fashioned lump limes and can be had at much less trouble and expense and the quality of the job will not depend on a laborer's skill in slaking.

The home builder will find that he will be very well repaid by a little care in this seemingly unimportant detail of home building. Proper plastering has so much to do with the beauty, comfort and permanence of the home that careful study of the subject is well worth while.



No. 149 A—As built in Ohio. For floor plans see page 153

---



## The Story of Keene's Cement

**K**EENE'S CEMENT having been in use upward of seventy years, is now recognized as an indispensable material for the interior finish of buildings. On account of its previous cost, it has not been possible to employ it except on the highest class of work. It is now placed on the market, however, at prices which compare favorably with those of any good standard hard wall plasters.

KEENE'S CEMENT has been manufactured in the United States since the year 1889 when a factory was established at Medicine Lodge, Kansas, after many months had been spent in finding suitable material with which to make a perfect Keene's Cement. The formula was brought from England, where it had been in use for many years.



Conference Room, House Office Bldg., Washington, D. C.  
Carrere and Hastings, Architects. Elliott Woods, Supt. Capitol Bldgs. and Grounds.  
The ornamental plastering in this room is of an unusually high standard.

A short description of what KEENE'S CEMENT really is would not be out of place.

With the exception of lime, practically all plastering materials for interior use may be broadly divided into two classes, both having their origin in Gypsum rock—namely, hard wall plasters and KEENE'S CEMENT.

In the manufacture of hard wall plaster, the Gypsum rock is first ground, then calcined for a short period at a low temperature, forming a very quick-setting material known as plaster of paris. To this are added chemicals to retard the set, also hair, fibre or such other ingredients as may be necessary.

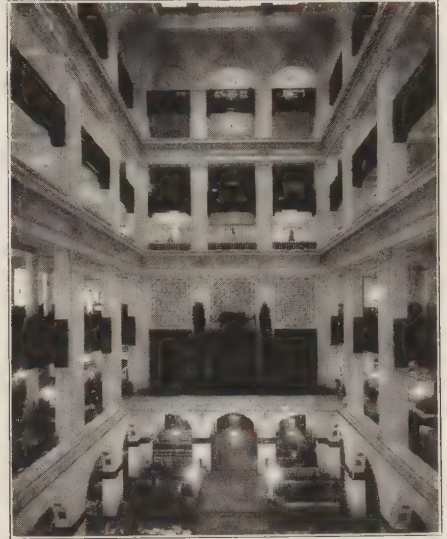


With KEENE'S CEMENT the process is entirely different. At no stage of the manufacture does KEENE'S CEMENT resemble in any manner plaster of paris, and no free chemicals or retarders enter into its composition. In the hands of experienced workmen the material goes through the various processes necessary to produce KEENE'S CEMENT, and it is packed in a pure form without the addition of hair, fibre or any other materials. From the moment the rock enters the mill, until the finished product pours into the sacks ready for shipment, the process differs at every point from the method of manufacturing other plastering materials.



Main Hall. Residence of R. A. Long, Kansas City.  
Henry F. Hoit, Architect.

Perfect plastering is one of the first essentials in a high class residence.



Light Well in Wanamaker Building, Philadelphia.  
D. H. Burnham & Co., Architects.

The pleasing appearance of the pure white pilasters shows the excellent results obtained by the use of Keene's Cement.

KEENE'S CEMENT contains no retarder; can be retempered as often as necessary; is comparatively slow-setting, and is very hard and strong, without being brittle. It can be worked over thoroughly until all marks of joinings or other inequalities are removed; and as it can be retempered, there is no danger of "dead" plaster being applied to the walls, thus doing away with a fruitful source of future trouble.

If "dead" plaster goes on a wall it is certain to cause trouble and expense, though very likely it will not do so until after the building has been accepted by the architect and owner. It is, therefore, apparent that the inherent property of KEENE'S CEMENT to stand retempering is of the utmost importance and value, resulting in economy of material and insurance against future cracking and crumbling.

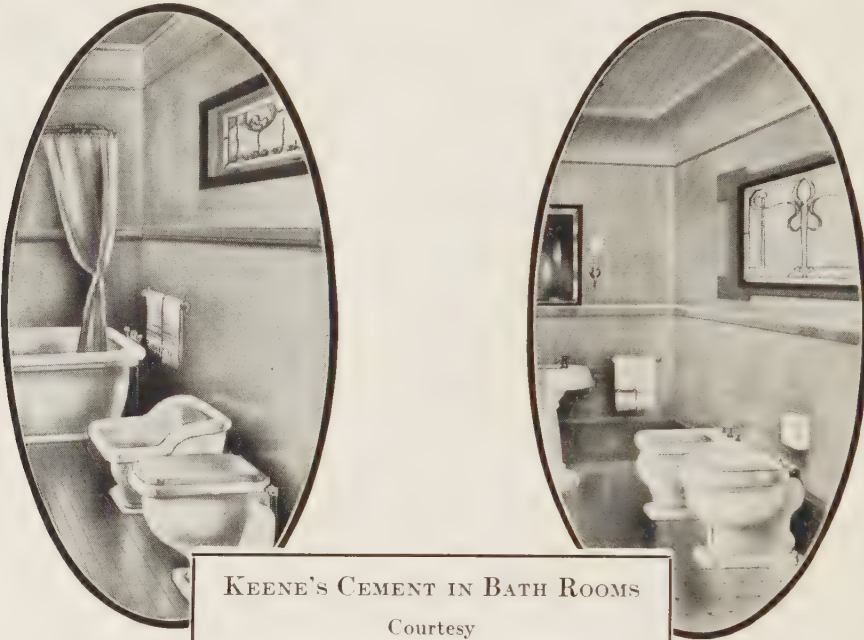
The hard, close grained surface of a wall plastered with KEENE'S CEMENT forms an ideal base for painting or enameling. The expense of sizing is unnecessary, and the work can be started within a few days after the plastering is completed, thus dispensing with the usual delay. The most delicate colors may be safely applied, as there is no free alkali in KEENE'S CEMENT.

KEENE'S CEMENT is occasionally regarded as merely a superior variety of retarded hard plaster, whereas it is the direct opposite of this. It is the absence of unsanitary retarders, and the close, firm, germ-proof texture of the plaster that have been responsible for the use of KEENE'S CEMENT in so many large hospitals, schools and other buildings where sanitation plays such an important part.

KEENE'S CEMENT should not be used as an exterior stucco. While at first the pure white appearance of a Gypsum plaster stucco is very pleasing, it is far from permanent and will wear away under the action of the weather.

Properly applied, KEENE'S CEMENT is permanent. It not only sets slowly, but hardens slowly, and a wall plastered with it grows stronger and more durable the longer it stands.

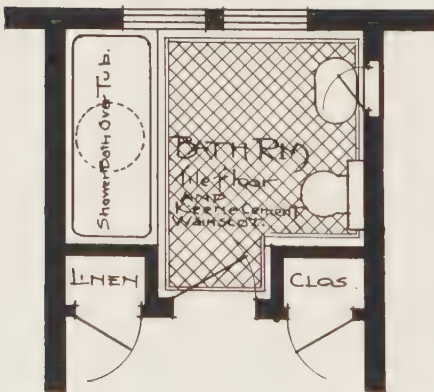
Named after the discoverer of the process, "KEENE'S" CEMENT has for nearly three-quarters of a century been the acknowledged standard in high-class plastering materials.



KEENE'S CEMENT IN BATH ROOMS

Courtesy  
THE BEST BROS. KEENE'S CEMENT CO.

The left-hand illustration shows a bathroom in which the walls have been plastered with Keene's Cement and left in a smooth finish, while in the right-hand view the Keene's Cement walls have been marked off in an imitation of tiling.



Typical bath room arrangement in medium cost home. Floor tiled, Keene's Cement wainscot, built in enameled iron tub, vitreous china lavatory, closet bowl and tank.





## A Common Sense Varnish Talk for the Home Builder

By CHARLES H. SMITH

Department Manager, Berry Brothers Varnish Mfrs., Detroit, Mich.

**A**LL builders of houses know in a general way that Varnish is largely responsible for the appearance of the interior woodwork, but it is doubtful if the laity recognizes fully the vast importance of Varnish in its relation to Architecture. In its special office, Varnish is as essential to a building as brick and stone, for although in the former the genius of the Architect finds visible expression, it is also true that it is to Varnish the chief beauties of the interior are due.

Natural woods may be said to resemble uncut gems that require the art of the lapidist before their beauties become manifest.

So the various woods while possessing a wealth of latent beauties, require development at the hand of the wood finisher to bring out and preserve nature's wonderful handiwork of grain and color with the aid of Varnish.

If the owner is interested enough to select the woods he desires for his interior trim, surely equal care should be taken to get the best results in the way of a finish on them; and this is easily done by taking steps to see that the right varnish is used.

It may be said, "Oh! I leave that to my architect," or "I let my finisher use what he thinks best."

That's all right to a certain extent, but you don't leave it entirely to your tailor or your shoemaker when buying a suit of clothes or a pair of shoes; you use your individual judgment in the selection of the material, and most of us possess sufficient knowledge of cloth and leather to guide us right.

Remember this: It costs just as much to apply a poor varnish as a good one, but while good varnish properly used makes a permanently beautiful finish, poor or inappropriate varnish betrays its pedigree by quickly perishing and leaving as a heritage a dull and faded look, marring the appearance of the woodwork and rendering it a source of mortification instead of pleasure to the owner.

Varnish mistakes are costly, but they are quite unnecessary and will not happen to the man who looks before he leaps in the matter of varnish.

What may seem an obstacle in the judicious selection of varnish is that one cannot choose it by its appearance as one can many other commodities; even an expert could not do this, as good and bad varnishes resemble each other closely before being applied.

Notwithstanding this it is just as easy to secure good varnish on your woodwork as it is to get a good hat, if you are in earnest about it.

If you are building a house, or expect to, when the work has progressed to the stage when varnish is called for, you will find it greatly to your interest to heed the following suggestions, bearing in mind the old proverb, "He is well served who serves himself."

*First.* Choose your varnish maker wisely, and let it be a manufacturer with an old established reputation; he has more at stake than you have, and could not afford either to put out unreliable varnishes or make a misrepresentation as to its adaptability for special uses.

*Second.* Trust your varnish maker by selecting the varnishes he offers as especially made and adapted for architectural work. He has made a life-long study of varnish, and knows what you want better than you possibly can. Experimenting with varnish comes high for the house builder. The varnish maker found it so years ago; but the experimental age is over and you have a right to expect the perfected result.

*Third.* Having decided whose and what varnishes you will have used on your woodwork, consult with your architect and have them clearly written in the specifications, just as you do what woods are to be used for the interior trim.

*Fourth.* See that a competent finisher is employed to do the work; the best of varnish cannot be expected to turn out well if improperly used.

*Fifth.* Make it your personal business to see that the varnish you want is actually used.

All this is very easily accomplished, and the little time expended will be repaid with compound interest by the resulting finish on your woodwork.

In bidding on a job, competition naturally disposes contractors to figure closely, and unfortunately one of the most common items to economize on is varnish.

From the standpoint of the owner, economy in the use of varnish does not mean that which costs the least money, and in fact it is usually the reverse as a poor or inappropriate varnish soon outlives its usefulness by fading, cracking or peeling off, rendering the woodwork unsightly.

As we reminded you before it costs as much to apply a poor varnish as a good one, so that there is nothing in favor of the low cost varnish but the insignificant amount saved on the price per gallon.

The finish on woodwork done with the right varnish lasts indefinitely, whereas poor varnish produces a finish nearly as frail as the bloom on a plum, and the work has soon to be cleaned off and refinished or look shabby and disreputable.

To present this important proposition in a practical way, a present saving of ten to twenty dollars on a few gallons of varnish, is effected at a cost of perhaps two hundred dollars or more, for completely refinishing within a year or two, to say nothing of the domestic discomfort while the work is being done.

Making a finish on wood is much the same as putting up a building, the foundation must be right. In the case of open grained woods, the fibre or grain must be filled with a good paste filler rubbed well in across the grain of the wood, so as to fill up all interstices and level up the surface. This is a process that is often slighted, and when it is, the finish will show it by numerous tiny depressions where the filler did not penetrate. An imperfectly filled job will never make a perfect finish no matter how many coats of varnish may be given to cover up the defective filling.

The foundation is just as important on close grained woods, such as pine, maple, etc., although they do not need any paste filler. Such woods should receive a first coat of shellac, which need not be a heavy one, and is really economical because it stops suction and makes a hard nonporous foundation to finish on.



There is one close grained wood that is used quite a bit for interior trim, and which deserves a passing mention by reason of its peculiar nature. We refer to cypress. This possesses a certain greasy quality that seems to permeate the wood and which requires sealing up before the wood can be properly varnished. The most effective way to do this is by giving two coats of shellac as a foundation for the finish, as the greasy sap with which the wood is filled will often come through a single coat of shellac and make unsightly blotches on the finish. This is worth making note of as an otherwise handsome job of cypress trim might be ruined or at least greatly marred by neglecting this precaution.

For the benefit of those who may not know, we will state that among open grained woods are Oak, Ash, Chestnut, Mahogany, Walnut, Prima Vera, Butternut, etc., all of which require filling with *Paste Filler*. These are not all the open grained woods employed for interior trim, but they are among the most commonly used.

Among the close grained woods are Pine, Maple, Cherry, Birch, Cedar, Redwood, Sycamore, Gumwood, Beech, Whitewood, cypress etc. These woods and others like them do not need filling.

And now before leaving the subject of Fillers we want to sound a note of warning as to their use.

The filler coat is the foundation of the finish on open grained woods, and it is as essential to a good finish as the foundation to a house.

We desire to repeat that all open grained woods should be filled, and that a *Paste Filler* should be used.

We do not encourage the use of Liquid Fillers, which are not "Fillers" in the strict sense of the word, but "first coaters," and could not fill the open grain of such woods as Oak, Ash, Chestnut, etc.

Liquid Fillers have their uses, as first coaters on certain finishing operations, but they are not adapted for fine jobs of natural wood finishing, although they are sometimes used as first coaters on close grained woods from motives of economy, when shellac is considered too expensive. This is not so however, as the covering capacity of shellac is at least twice as great as Liquid Filler and is therefore more economical.

We always recommend shellac for first coat on close grained woods, which should be applied directly to the wood when finished in the natural color, and should follow the stain coat when the wood is stained.

In cases where the wood is filled, the Shellac coat may be omitted if desired, but no great economy is effected thereby as at least an additional coat of Varnish would be necessary to make up for such omission.

With reference to the cost of natural wood finishing for interiors, it is generally conceded that the acme of perfection is a rubbed finish, and it is also known that the rubbing process is by far the largest part of the expense. It is not so generally understood among the laity, however, that it is not necessary to go to the expense of rubbing as soon as the varnishing is done, but that if the right varnish is used the rubbing may be deferred for a year or two, or indefinitely till the owner can afford it. We believe this piece of information will be interesting to many builders of medium cost residences; we have found it so frequently when writing correspondents.

There is one question concerning varnish that no doubt often occurs to the builders' mind and that is how long it will last. While it is not always so easy to read the horoscope of varnish as it would be of a kitchen range for instance, the former will often outlast the latter, that is, of course, a high grade varnish, but the "ordinary article" will probably outlive its usefulness during its first year of service.

---

For front doors and store fronts on which the exposure is necessarily very severe, the use of only the very best exterior varnish should be permitted, and about once a year is not too often to refinish or at least to give another coat of varnish.

### COVERING CAPACITIES

How much surface varnishes, stains etc., will cover is a question that is often asked and the following estimates may be found interesting.

A gallon of varnish will cover approximately 600 sq. feet, one coat.

A gallon of Shellac will cover from 700 to 750 sq. feet.

A gallon of Water Stain covers about 650 sq. feet on open-grained woods, and on close-grained hard woods, 100 sq. feet more. On soft woods a gallon of Water Stain will cover from 400 to 500 sq. feet.

A gallon of Spirit Stain will cover from 300 to 400 sq. feet, according to the wood.

A gallon of Oil Stain will cover about 600 sq. feet on all woods.

A gallon of Paste Filler reduced for use covers about 300 sq. feet, and from seven to nine pounds of paste filler are required to make a gallon.

A gallon of Shingletint covers about 160 feet, one coat, if brushed on; 1½ gallons covers the same surface, two coats. From 2¼ to 2½ gallons will dip 1,000 shingles, and another gallon is enough for a brush coat in addition after the shingles are laid.

### FLOOR FINISHING

There are two methods of treating natural wood floors, waxing and varnishing. Both require the same preliminary treatment. That is, open grained woods, such as oak, require filling with a good *Paste Filler*; and then, if the floor is to be waxed, the Floor wax is applied by rubbing in over the Filler coat as directed by the manufacturer. This makes a handsome enough finish, but requires hard labor to keep it in first-class order.

Close grained woods, such as Maple, Cherry, etc., are finished in the same manner as above, but the coat of Paste Filler may be omitted.

#### DO NOT USE LIQUID FILLERS FOR FLOOR FINISHING UNDER ANY CIRCUMSTANCES.

The varnished floor does not need any Shellac coat. Apply the floor varnish next to the Filler Coat on open grained woods, and directly to the wood on close grained woods. Two thin coats of the Floor Varnish should be given, taking care that the first coat is hard before applying the second. The last coat can either be allowed to remain in the natural gloss, or given a slight rubbing when hard with pulverized Pumice Stone and water or crude oil to tone down the high finish.

Such a floor is superior in appearance to the waxed floor, and the finish, which has great durability, (if the right varnish is used) requires practically no labor to keep looking fresh and handsome. Worn spots are easily and quickly renovated with a thin coat of the varnish when they need it, and thus the acme of beauty and economy is attained.

It is not the aim of this article to encourage the average man to attempt to finish the woodwork of his house, as although the various processes are in themselves simple, yet it must be remembered the art of wood-finishing is one of the skilled handicrafts, and the best results are obtained when the work is done by a competent Finisher.

Before closing we want all our readers to know that we welcome inquiries concerning wood-finishing, and will answer all questions promptly.

In our little talk on varnish which is necessarily brief and incomplete, it has been our main aim to arouse a personal and intelligent interest in Varnish and to show the importance of using the right goods, for if as Ruskin says: "*Architecture is frozen music*", *Varnish is certainly an essential note in the harmony.*





## The Preservation of Wood

By C. H. HOYT: CARBOLINEUM WOOD PRESERVING CO.

**Y**OU, no doubt, have noticed the small shelf-like brackets and the larger toadstools growing out from the side of boards and logs that have begun to decay. You have also seen the punk which often lines cracks and crevices of wood. Did you know that these forms are the dead or fruiting body of the fungus of decay? These same forms have given off spores or seeds as fine as dust which will float around in the air, lodge in cracks of sound wood and with proper heat, moisture, and air will develop into thousands of low vegetable bacteria which will rapidly destroy or decay any wood which is thus contaminated. All decay in all woods is then a bacterial disease.

Some woods such as hemlock and basswood are attacked by many species of this germ, and some woods, such as the teak and red cedar, are so disinfected by nature that very few, if any, disease germs can exist. Thus we see why we have quick and slow decaying woods.

Now, if we understand the nature of decay, we can better understand the remedy.

Paint, coal tar, or any other surface coating, will not stop decay but often promotes it. This is seen when we paint a shingle roof or paint over any damp or sappy wood. The bacteria of decay have a better condition for life than if the wood were left unpainted.

The importance of Wood Preserving is beginning to be felt in this country as it has been in Europe for the past 40 years. As lumber becomes scarce the price goes up, the quality gets poorer, and we get a larger per cent. of sap, as we must use smaller trees. In view of these facts all property owners should understand, at least, the principles of wood preservation.

Nothing quite takes the place of wood. The most artistic, economical, and practical houses and buildings are still made of wood. No roof has ever been devised which is as light, as handsome, and as economical as a properly treated shingle roof. The beautiful grains of cypress and yellow pine cannot be imitated for interiors or exteriors, and these woods can be preserved much better than by painting.

Wood is still the most satisfactory material for floors. It has been proven that if properly treated it will outlast even stone for paving streets. The three greatest streets in the world are paved with wood block.

The necessity of preserving wood is greater to-day than ever before and should be understood. There is no way owners can save money faster than by preserving their wood structures. It is certain that a simple brush treatment with the proper oils will double the life of floors, shingles, posts, sills, and any exposed wood. This means a saving of about 400 per cent.

Nature showed us how to preserve wood in the Teak and Red Cedar. These woods are so loaded with natural disinfectant that no fungus of decay can exist, especially in the Teak. This wood has been known to remain in the ground 1,000 years in perfect state of preservation. Red Cedar, while not so perfectly disinfected, will not decay for 50 years in the ground. The rate of decay is in proportion to the antiseptic properties of the wood.

These facts point clearly to the methods we must follow to prevent decay. The decay germ feeds on the sweet parts of the sap as well as the wood structure. The sap wood is of little value if not preserved, but is easily made as good as the heart.

The preservative to be a success must be a deeply penetrating oil. It must be absolutely insoluble so it will not wash out. It must be non-volatile so it will not evaporate. It should chemically destroy the sweet parts of the sap and it should harden and toughen the wood. Up to the present, two practical methods have been worked out. The first is practical for large lots of lumber where expensive machinery must be used, and is known as the pressure treatment or creosoting method. By this process low grade Coal Tar oils are forced in the wood fibre under pressure, and while the timber will not decay it is rendered brittle.

The other and more practical method for builders is a superficial treatment with a high grade oil of coal tar and was discovered about 45 years ago by the noted German Chemist, Richard Avenarius. The oil used is a very strong disinfectant of great penetrating power and is absolutely insoluble and non-volatile.

It not only destroys all form of fungus but the albuminous sap which feeds the germ of decay. It will stay in exposed wood many years and no decay can take place while there is a trace of this oil present. Two brush coats, or one dipping will go through four or five shingles, laid as in a roof and impart a rich permanent nut brown stain.

The dryer the wood, the easier to treat. Green wood, or wood used underground, should have extra thorough treatment. Shingles need not be dipped and can be preserved by applying two brush coats a week or so apart, and given an additional coat once in 10 years. The nails will not rust and the shingle never curl. The same treatment can be given cypress and yellow pine as this oil will hold on the resinous woods, and the treatment is easier to apply and cheaper than paint. Wood preserved by this method can be safely painted in dark colors, and paint will last longer over it than over a priming coat of paint. After the beautiful walnut brown color comes out, which takes a few months of sun, it is good practice to oil the wood with linseed oil, or better, with Durable Lac Oil which will hold the color.

Examples of this method can be seen all over Europe where many stations, lodge houses, and fences have this rustic nut-brown stain that is perfect after 30 or 40 years.

This wood preserving oil known as Carbolineum acts chemically but does not prevent wood from seasoning. It acts as a permanent disinfectant, and permanent disinfection is wood preservation.

This same oil will render poultry houses, stables, hog pens, trees, immune from the attacks of any vermin or bacterial disease. It is a most remarkable, cheap and simple method, and is rapidly growing in favor and the time will soon come when no one would think of placing a stick of timber anywhere, where it might decay, without first preserving it.





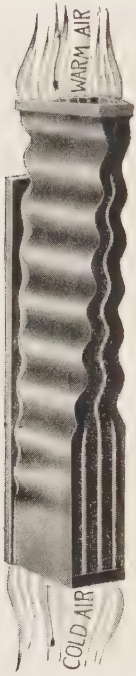
By JOSEPH E. MANNEN

**F**OR hundreds of years men have been developing new and more efficient methods for heating residences, but it is only within the past few years that the proper ventilation of the home has received any attention. The heating engineer has devoted all his efforts to the development of economical heating efficiency, the architect has striven to make buildings air tight, and then physicians direct their patients to open the windows of their sleeping apartments and spend as much time out doors as is possible.

However, despite the ever increasing research and scientific methods of treatment, there is an alarming increase in tuberculosis, pneumonia, catarrh and kindred bronchial and lung diseases. Tuberculosis experts state that two causes are primarily responsible for the distressing increase of this dread disease. Bad air and poor food are the sole agents of this wide spread calamity. We must therefore have food of a poorer quality than we did ten or twenty years ago. With our higher standards of living it hardly seems possible that the quality of our food has deteriorated. Besides, these diseases number among their victims numerous persons in the middle classes and the rich. It evolves, therefore, that these ailments can be laid entirely at the door of impure air. In fact the Health Department of Chicago has grouped all bronchial and lung diseases under the heading of bad air diseases.

If bad air is then the source of all these evils, wherein does its power lie. True it is that the air in our manufacturing centers is notoriously contaminated. Impure outdoor air is surely harmful, but it certainly does not account for the alarming increase in these diseases. Furthermore, how would you then account for the increase in the suburban and farming districts? Impure indoor air is the only solution. This is recognized in our crowded tenement districts; and though in not so marked a degree, it is equally true in the modern homes and high grade apartment houses.

With our modern construction, our sanitary plumbing and electric lights—though even gas light is less contaminating than a coal-oil lamp; there is less air contamination than formerly. Thus there must be less fresh air admitted to account for the increase in foul air. The direct heating systems widely in vogue at present (such as steam, vapor or hot water) do not allow for a supply of fresh warm air nor do they draw in fresh air from the outside. The occupants of the room simply rebreathe their own exhalations; and, in consequence, the longer they remain in the room, the fouler the air becomes. There is admittedly a small egress of air at the windows and doors, but this is so small and the process so slow as to be practically useless. The direct-indirect radiation systems of steam, hot water and vapor allow for a small supply of fresh warmed air to the rooms, but, in most cases the ventilation is insufficient. The purely indirect

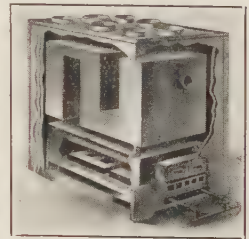


radiation system of the steam, etc., is highly efficient but impractical for other reasons. It is firstly very cumbersome, taking up immense room; secondly, it is extravagant in fuel consumption; and, thirdly, the cost of installation is prohibitive.

Summing up the proposition, the only practical and efficiently sanitary system of heating is an indirect warm air system, properly installed by good heating contractors. In a house properly heated by a good indirect system, the air is changed from two to six times an hour. Ventilation is a paramount necessity in such a system. If the ingress of fresh warm air or the egress of foul air is tampered with, the system will not heat satisfactorily. True it is very desirable to add moisture to the rooms. A hot water pan, used in connection with an indirect system, is necessary to the proper humidity of the atmosphere.

Since an indirect warm air system is the most sanitary, the selection of an efficient warm air generator is the first necessity. What constitutes the best in the warm air heaters? Method of construction, size of heating surfaces, volume of air heated and the method of heating it, even circulation of the warm air currents and the possible control of them, fuel consumption, ease of management, and repair expense; all these should receive a very careful consideration. The warm air generator that possesses these to the greatest degree, should be given the preference. A zig-zag tubular construction will make for a greater heating surface and greater weight. It will also warm the largest possible volume of fresh air, give an even, positive circulation and a sure and simple control of the warmed air. The air will be warm and not dry hot air. Thus the fuel consumption will be reduced to a minimum; and actual tests have shown that the repair expense, from the consequent non-overheating of the parts, is less than in any other type. The fuel consumption remains the same all through its use. It does not increase every year as with the vapor systems. You have no doubt noticed the scales that form on the inside of your tea kettle. These are shaken off by the constant moving and jarring of the kettle; but in the case of the radiator, it grows layer on layer until in time it plugs it. It has been known to increase the fuel consumption of the tenth year to ten times that of the first year. Meanwhile, the fuel consumption of the warm air generator remains the same; and in some cases decreases.

Natural gas is now becoming an important factor in heating. The previous conditions are equally true in its use. The indirect warm air generator is supreme. A heater that has a radiator, which will retain the heated products of combustion over the greatest space is the best. A radiator of the S-shape or similar will give a larger radiating surface and a most efficient use of the fuel consumption. With the draft pipe leading directly from the radiator, there is no possible escape of fumes to the rooms. The arrangement of the burners should be such that the firebowl is heated instantly and uniformly, even though but one burner be lit. Placing the burners around the inside of the firebowl assures this at all times. The joints should be constructed in a thorough manner. A heater of this type will give ease of operation, extreme cleanliness of even the basement, low fuel consumption and the expense of repairs will be abnormally small.





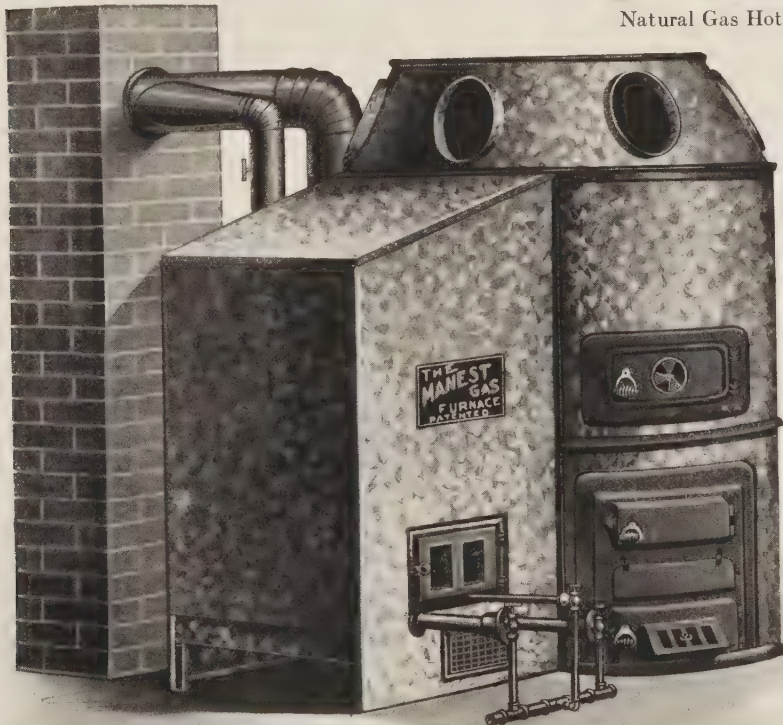
I have been often asked about combination heaters. There is only one way of combining a coal and gas furnace; and that is to attach the gas heater to the side of the coal. Your furnace can no more serve two masters than a man can: it is impossible for it to serve the master of coal and gas in the same arrangement. It must slight one or the other and, in most cases, would undoubtedly slight both. Exhaustive investigations have indisputably demonstrated this fact.

To my mind, and on the authority of physicians and sanitary engineers, the selection of your mode of heating and your heating contractor is of the utmost importance. At least half your life is spent in your rooms; and, as pure air is the greatest foe of the present ills, you should see to it, that the air in your home is



Natural Gas Hot Air Heater

not foul or contaminated. Apart from that, the indirect warm air system is the most economical in both installation and fuel consumption. Why not, therefore, give this mode of heating your most careful consideration?



Natural Gas Attachment to Coal Furnace



## The Heating Problem

**A** MAN about to build a house has a number of important questions to decide. The most important is the heating problem. House heating is a problem because it is something that must be carefully worked out in order to get the right answer. It is the most important problem in connection with the house building, because upon its correct solution depends home comfort.

Everything about a house is secondary to its heat. The heat must be adequate, it must be obtainable and maintained, it must be healthful heat, it must be clean heat and it must be economical heat.

There are no general rules for obtaining this. There is no heating formula which can be successfully applied to all houses.

The size of the house, the arrangement of its rooms, the material from which it is built, the climate of the country in which it is located, and the situation of the house in relation to other houses or buildings must all be taken into consideration in working out a successful heating equipment.

You might think from this that house heating was a difficult problem. It isn't. Given a house of any size, of any kind, in any locality, it can be adequately, healthfully and economically heated without trouble, without experimenting and for all time.

### The Different Kinds of Heat

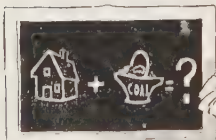
**I**N ORDER to do this it is necessary that you should know more about heat and heating equipment. You should know that whereas there are a score of heating systems, there are but two kinds worthy of serious consideration.

These two kinds of heat are hot water and steam.

The heat of the modern dwelling is manufactured in the cellar and carried throughout the house by means of pipes. The manner in which the heat is carried throughout the house and disseminated in the various rooms is called a system.

There are many such systems but without sufficient heat to carry no system will work, and therefore that part of the heating equipment which produces the heat is the vital thing, and the thing that you, the house builder or the house owner, should know enough about to enable you to buy intelligently.

That part of a heating plant where the heat is generated is called a heater or a boiler. Sometimes it is called a Hot Air Furnace.



You might think that house heating was a difficult problem.

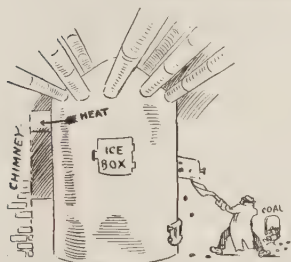




## The Shortcomings of Hot Air

**B**EFORE taking up the question of how these systems operate we will mention the Hot Air Furnace in order to dismiss it. The shortcomings of hot air are too well known to need any lengthy discussion. It is known that this kind of heat is not adequate, not healthful and not economical.

It only heats in spots. It never heats the side of the house from which the wind blows. In other words, it only gives sufficient heat under certain conditions and in certain parts of the house and gives this only at a high fuel cost.



A hot-air furnace is a spendthrift on coal

The most striking argument in this connection lies in the fact that it is often necessary to have a pipe coil or an auxiliary water heater placed in the hot air furnace firepot to supply heat to remote rooms where the hot air cannot be driven or conducted.

Having mentioned hot air heat and having eliminated it we now come to steam and hot water, the only methods of heating which will keep a house sufficiently and evenly warm regardless of the weather, without enormous fuel expense and without constant attendance.

## How Hot Water Heats

**T**HE principle of hot water heat is very simple. The water is heated in a cast iron boiler. When water is heated it rises. When the water in the boiler becomes hotter than the water above it, it goes up the pipes through the radiators where the heat it has stored up is released.

This water is sufficiently hot to give off enough steady heat to heat the coldest room on the coldest day. As fast as the water is cooled it returns automatically to the boiler to be heated again.

Thus the water is in constant circulation, the hot water going to the rooms to be heated, giving out its heat there and returning to be reheated.

You know how hot water retains heat. You know how things are cooked in a double boiler. You know that you fill hot water bags to apply heat to any part of the body because water retains heat for a great length of time and gives it off more evenly than any known substance.

The great value of hot water heat is that it holds sufficient heat to cope with any cold; that it is an even heat which does not vary; that with a proper heating system it can be carried to the farthest and coldest corner of any room in any house.

If the fire under the boiler should go out, there is no sudden drop in the temperature of the house even on the coldest day. Several hours may elapse between the time the fire goes out and the time it is rebuilt, without a noticeable change in the temperature of the room.

This is the whole story of hot water heat. It is all you need to know about it to decide.



Hot water heat can be carried to the farthest and coldest corner of any room in any house

### The Difference Between Steam Heat and Hot Water Heat

**T**HE difference between hot water and steam heat is this: Water when heated in the boiler rises by the law of gravity to the different radiators throughout the house. Steam is forced up through the pipes to the radiators by low pressure in the boiler. This pressure rarely exceeds two pounds even in the most severe weather, and often steam is maintained in all of the radiators without showing any pressure on the boiler.

Whether the heat is hot water or steam the equipment is practically the same. That is, it requires a boiler, pipes and radiators.

A hot water equipment, however, requires return pipes for the complete circula-

tion of the water, whereas with steam return pipes are unnecessary. Hot water also requires greater radiation surface than steam. These two items make the difference in cost of equipment between hot water and steam heat.



Steam costs a little less to put in but hot water saves a little more in fuel

A steam heating system heats more quickly because steam rises more quickly. It also cools more quickly, but as far as giving off heat is concerned, it furnishes an adequate supply.

The water in the boiler, being a smaller quantity than the water used for the hot water system, quickly rises to boiling point, the steam rises and goes all through the house.

As steam cools down it is condensed; that is, turned into water, and this water returns to the boiler where it is again made into steam.

This process is repeated over and over so that the change from water is continuous day and night.

Beyond the fact that steam heat costs a little less to install than does hot water heat, there is little choice between the two methods. Get a boiler the right size and of the right kind, have the installation of the system made by an experienced hand and you will get a perfect heating system, one that is easy to manage, free from all danger, noiseless in operation, economical, healthful and efficient.

On the cost you will find that, while it costs a little less to put in a steam heating equipment, this difference in cost is offset by the fact that in a private dwelling the fuel savings is a little greater with the hot water system.

### Selecting Your Boiler

**H**AVING convinced yourself that your choice lies between steam and hot water, and having made your choice, then comes the selection of the heater or boiler and the radiators.

When a certain boiler is recommended to you you ask two questions.

The first question is, will the boiler recommended produce sufficient heat to comfortably heat your house. And the second question is, can this heat be inexpensively produced.

These questions are important—very important—because a combination of comfort and fuel economy is the greatest argument in its favor which a boiler could have.

But fuel economy and comfort are not the only things. Do not forget durability, freedom from repairs and simplicity of operation. What good is fuel economy if the money saved must be spent in keeping





a boiler in order. What advantage is there in making a saving on the first cost of a boiler if that boiler must soon be replaced by another? What advantage is there in securing comfort upstairs if it takes the greater part of somebody's time in the cellar to secure that comfort?

The question of what boiler, is one which should not be left entirely to others. It is too important, and because it is important you should have a voice in the selection of your boiler and sufficient information regarding boilers to come to a wise decision.

Owing to the fact that almost every building presents its own individual heating problem you should bear in mind that in order to obtain the proper equipment it is essential that you purchase reputable goods manufactured by a concern whose business permits of their offering you a large assortment of boilers in styles and sizes with a different flue arrangement suitable for various fuels and various requirements.

It may be that your building will require a large amount of radiation and in order to obtain adequate heat under such conditions it would be necessary to install a vertical sectional type of boiler so constructed that it will permit of sections being added or replaced without tearing apart the whole boiler, disarranging the piping, or interfering at all with its work of furnishing heat.

It is not necessary, however, that this vertical sectional type of boiler be used in all cases and in order, therefore, to meet all needs a manufacturer of recognized standing will be prepared to furnish round boilers in a large variety of styles and sizes so that one of them is sure to fulfill your requirements.

Out of all these types and sizes there is just one in which you are interested. The manufacturer does not know which one this is and you do not know, but an experienced steamfitter can tell you exactly and he will be able to show you how with one of these steam or hot water boilers and the proper amount of radiation you can positively heat every nook and corner of your house, maintaining any temperature you desire in any kind of weather.

### Radiation

**T**HE discussion of a heating system would not be complete without a word or two on radiation. The boiler in the cellar, that makes the heat, might be called a manufacturing plant. The radiators in the various rooms throughout the house might be called distributing plants.

The number and size of radiators required in any house, and their location in order to get the best results, are matters for the steamfitter to decide. The making of these radiators, along artistic lines and in a sufficient variety of heights, lengths and shapes to meet all requirements is a part of our business.

The hot air man will tell you that radiators are unsightly and inconvenient. Do not agree with him without knowing the facts. Go to your dealer and steamfitter and see the different types of radiators. Go to the homes of your friends where hot water or steam radiators are installed. Note the many artistic patterns and graceful lines of these radiators. See how cleverly many of them have been put out of the way.

You will find them shaped for certain spaces like corner nooks and often under seats. Some are tall and narrow, others are broad and wide. Most of them are placed under windows, thereby occupying space which could not be used for any other purpose, and the best possible space for radiators because they are heating the fresh cold air which



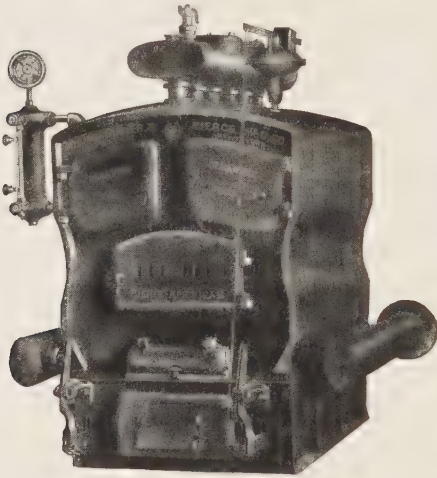
Pierce Lorraine Radiators

comes in around the casement. Radiators are never in the way, are never cumbersome and never out of harmony with their surroundings. And certainly they are preferable to registers which are merely holes in the floors or walls directly connected with the cellar and bringing germ breeding and dust-catching air in the room.

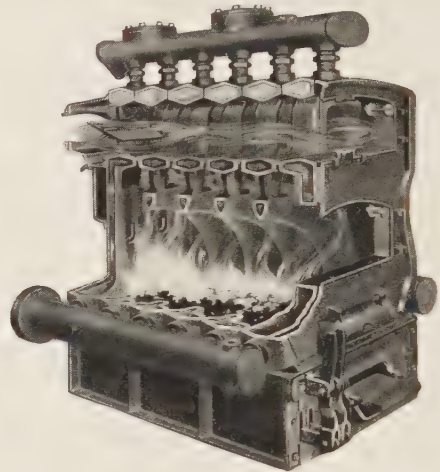
### In Conclusion

SO THE man who is about to build a new house and the man who wishes to make an old house comfortable have not much of a problem after all.

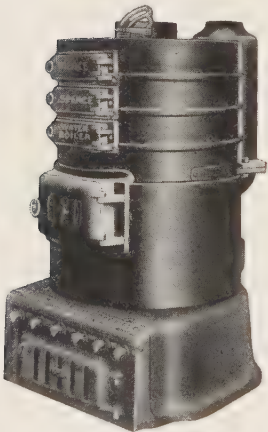
They both know the kind of heat they ought to have, and they know that a competent steamfitter can give it to them. They also know the part which the boiler plays and the part the radiators play in a successful heating equipment.



Pierce-American (Vertical-Sectional) Boiler  
for Steam or Hot Water



Sectional View of Pierce-American



Pierce-Spence Water Boiler



Pierce-Modern Boiler  
For Steam or Hot Water



Pierce-Touraine Boiler  
For Steam or Hot Water

OUT OF ALL OF THESE THERE IS JUST ONE IN WHICH YOU ARE INTERESTED





## Vapor Heating For Homes

**EXPERIENCES THAT COME TOO LATE**—The heating of a house is of first importance. It is often however sacrificed to other things. This results in discomfort, dissatisfaction and usually an extra expense. A cold house in zero weather, and an overheated house in mild weather and always accompanied by a heavy coal bill is very common.

**HOT AIR HEATING AND ITS TROUBLES**—Our ancestors used a charcoal brazier for heating their homes. Then the open fireplace and later stoves were employed. The dirt and discomfort of stoves gave rise to the Hot Air furnace. This method of heating was a long advance on the older and cruder methods. But it was discovered immediately that Hot Air had its drawbacks. Dust from the furnace and frequently smoke found its way into the rooms, and the rooms on the side of the house against which the wind was blowing, were generally cold—it is almost impossible to get the heated air to travel against the direction of the wind, and further, the heat obtained is out of proportion to the quantity of fuel used.

**STEAM AND HOT WATER NOT SATISFACTORY. VAPOR THE IDEAL HEATING MEDIUM**—All this led to the demand for something much better. Steam and Hot Water were tried and very extensively used as heating mediums. They were both found to be a great improvement upon the Hot Air furnace. But up-to-date heating engineers and contractors while installing these systems were looking for something better—a something that stood midway between Steam and Hot Water, having the advantages of both without their disadvantages. Vapor was looked upon as the ideal medium of heating, but it could not be used, as there was no known way of controlling it. But when a perfect control was obtained (see page 66) it sprang at once to the front rank as a system of heating. Vapor is steam under atmospheric and not pressure conditions.

**VAPOR GETS TO THE HEART OF THE HEATING PROBLEM**—Pointing to a radiator in a hotel lobby, a man said: "Now is not that a fool thing? It is giving off as much heat this warm day as it did yesterday, when it was very cold." And this just criticism is true of both Hot Water and Steam Systems, for with them the whole radiator has to be heated. It is right here that Vapor becomes such an ideal heating medium, for it can be so controlled that a radiator can be made to give off as much heat as the weather may demand. And this can be done in a very simple way without costly machinery. (See page 299 for cut showing partially heated radiators.)

A study of the following table will show the relative values of Steam, Vapor and Hot Water:

<i>Steam System</i>	<i>Vapor System</i>	<i>Hot Water System</i>
No control—a radiator must be heated through-out.	Positive control—any percentage of a radiator may be heated. See cut on page 299.	Same as Steam but temperature of water may be lowered by reducing fire.
Air vents on radiators to leak and sputter.	No air vents. No sputtering or leakage. See cut, page 66.	Air vents on radiators, which may leak.
No water to freeze.	No water to freeze.	All radiators and pipes filled with water; an open expansion tank. Danger of freezing or leaking.
Intense, disagreeable heat.	Mild, genial heat.	Mild, genial heat.
Radiators slightly smaller than Vapor.	Hot Water radiators 50 per cent. larger than Vapor radiators.	Radiators one-third larger than for Vapor.
Very often noisy.	No noise.	No noise.
All radiators heat as freely as air vents permit.	All radiators heat very freely—no air vents.	Radiators some times heat in erratic manner owing to uncertain circulation.
Heats as quickly as air vents permit.	Quick action. No resistance.	Very slow in heating.
Not economical.	Economical.	Requires much attention to be economical.
Poor combustion because of poor damper control.	Almost perfect combustion owing to perfect automatic damper control.	Very poor combustion—almost no damper control.
Operates with pressure figured in pounds. Pressure too erratic	Operates with a maximum pressure of three ounces. Uniform heat.	Very heavy pressure upon system, 10 to 20 pounds, according to height of building.
Cost of up-keep the highest known.	Cost of up-keep reduced to minimum owing to low pressure.	Cost of up-keep relatively low.
Poor damper control therefore frequent firing necessary. With hard coal about every six hours.	Perfect damper control—firing about once in twelve hours with hard coal.	Very uncertain.
Radiator valves slow in opening or closing—much turning necessary.	Quick opening radiator valves—a touch will open or close.	Radiator valves hard to turn, stick easily.



A study of the foregoing table shows that among the chief values of vapor not obtained by hot water or steam are the following:

*First*—CONTROL OR GRADUATION THE GREATEST VALUE OF VAPOR—The ability to get as much heat as may be necessary according to weather conditions. That the heat in a room depends upon partially turning on or off the heating or graduating valve on the radiator in that room. Every room may be kept at the temperature desired by its occupant and this independently of all other rooms.

*Second*—ECONOMY—As the amount of a gas or electric light bill is determined by the actual amount used, so the amount of fuel is determined by the amount of heat used. The partial turning on or off the controlling or graduating valve will determine the fuel consumption.

*Third*—NO AIR VENTS AND THEREFORE NO LEAKAGE OR SPUTTERING—That the great trouble and loss caused by air vents in both steam and hot water systems is entirely overcome by their total absence in vapor.



CONTROLLING OR GRADUATING VALVE

*Fourth*—SUNDRY VALUES—VAPOR WITHIN THE REACH OF THE AVERAGE HOME OWNER—That vapor is absolutely without noise; that its heat is very agreeable and not hot, dry and scorching, that the radiators are considerably smaller than those used for hot water; quick to heat up in cold weather, quick to cool off in mild weather; and that it is economical. A vapor system requires no machinery to operate. It is the very simplest of all heating systems. It is strong and does not get out of order and there is no skilled attention necessary to operate it. Vapor has been in successful operation for years, but has been limited to residences of high cost, but now it has been so simplified and made so efficient and economical as to place it within the reach of the average house owner. It will give the maximum of comfort, of economy and of efficiency.



## What You Should Know About The Heating Plant

**N**OT a great many years ago, in the planning and building of a home, almost the very last item to receive serious consideration was the heating apparatus to be installed,—mostly Hot Air Furnaces, Stoves or Open Grates. Today it is different.

With the advent of modern heating appliances—Steam and Hot Water Radiators, and Boilers, the intelligent home builder must of necessity decide the matter of his heating plant early in the planning. No part of the home is so essential to the health, comfort and happiness of the family as the heating system.

It is therefore highly important that the man who builds intelligently, should look carefully into the heating question, ascertain for himself which is the best system that can be installed, and acquaint himself with the details of same. His Architect will tell him that the large majority of modern homes are being equipped with Steam or Hot Water Heating Plants, of which the Radiators and Boilers are the essential parts.

In considering the Radiators, he should select *Radiators*—

That are durable.

That give the greatest volume of heat with the least fuel consumption.

That can be heated up and cooled off in the shortest possible time.

That will heat all the rooms evenly throughout.

That will not cause the floors to sag; that are strong but light in weight.

That can be suspended on Brackets without requiring extra heavy walls to carry them.

That are made of material that is uniform in thickness, free from sand and blow holes, and will not break open from uneven contraction and expansion, or the freezing of contained water.

That will occupy the smallest possible space.

That are the most sanitary.

That are neat and attractive in appearance.

Pressed Metal Radiators conform more closely to the foregoing specifications than any other kind now manufactured. Notwithstanding the impression that they are a comparatively new product, radiators made of Pressed Metal for Steam and Hot Water heating systems were first introduced more than half a century ago, and have always been considered the most efficient radiators that have ever been developed. Thousands of these pressed metal radiators have been in continuous service for a period of over 50 years, and have fully demonstrated their durability and efficiency.

\*Edward P. Bates, a pioneer Master Steam Fitter and Heating Contractor, in referring to these early pressed metal radiators says: "The Sheet Iron Radiator is well known. In 1854 Samuel Gold took out patents on what was known as the Gold Sheet Iron Radiator. It is the best radiator ever made as it will condense at least one-third more steam per square foot than any other radiator which has ever been constructed,

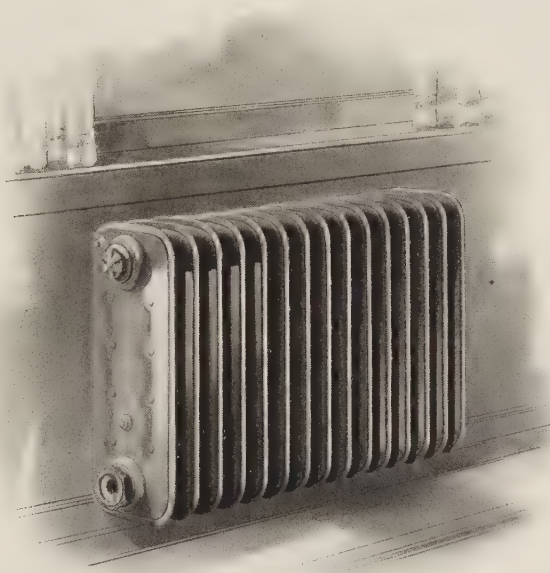


thus being very efficient in its heating power. In the former days, when the writer first went into this business there were a great many comments about this style of radiator, its construction, durability, etc. The writer has in his own house at the present time a series of Gold Sheet Iron Radiators 45 years old, which are doing perfect work. He also set several thousand of these radiators which have been in constant operation from 35 to 42 years and are perfectly satisfactory to the parties who are using them, thus establishing the durability of the radiators."

The many advantages of Improved Pressed Metal Radiators are so obvious and well known that more than a brief reference is unnecessary.

In this age of sanitary appliances, what is more important to health than sanitary heating appliances?

Improved Pressed Metal Radiators are the only *sanitary* kind. Owing to their clean, smooth surfaces they will not catch and hold the dust and germs drawn to them from the surrounding air. Furthermore, owing to their construction and lightness in weight, as compared with heavy cast iron radiators, they can be suspended from the side walls on concealed brackets, the pipe connections to the radiators coming out through the walls instead of up through the floors. This renders it easy to keep the floors underneath the radiators clean and free from dirt that invariably collects under radiators set on feet.



*Quick action* is a most desirable feature in Direct Radiation and is possessed to a remarkable degree by the modern Pressed Metal Radiators. No long waits for heating up or cooling off. They respond instantly to the opening of the valve, owing to the small amount of metal which must be heated up before the radiator can become an effective heating agent in the room. For the same reason they cool rapidly when the valve is turned off. This permits a fine control of the temperature, and effects a saving in fuel bills.

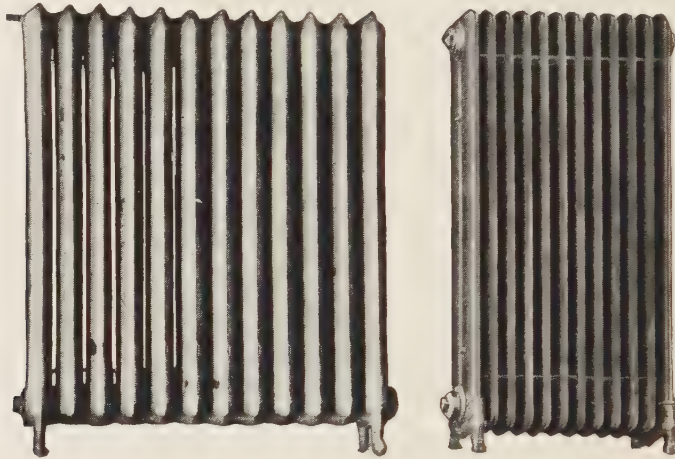
\*Paper read at the Twenty-third Annual Meeting of the National Association of Master Steam and Hot Water Fitters, held in Chicago, May 29th to June 1, 1911.

---

Improved Pressed Metal Radiators are highly *efficient*. On account of their thin walls, enlarged air space between the sections and rapid circulation, they will heat a larger volume of air than any other radiator ever constructed, and will create a uniform temperature in every part of the room.

The fuel economy effected by the use of Improved Pressed Metal Radiators is very apparent for the reason that their containing capacity in proportion to their heating surface is much less than cast iron radiators, thereby causing rapid circulation of the heating medium. Furthermore, Pressed Metal Radiators have no thick walls to be heated with heat that is wasted, as is the case with cast iron radiators.

One of the principal advantages of Pressed Metal Radiators is their *compactness*.



They occupy only one-half to two-thirds as much space as occupied by cast iron radiators. For that reason they have been selected and installed in many of the most handsome and expensive homes, their neat design and attractive appearance harmonizing with beautiful surroundings, and never standing out obtrusively as do the old fashioned cast iron radiators.

Radiators made of highly refined rolled metal weigh only one-third as much as the ordinary cast iron radiators, but notwithstanding their lightness in weight they are very strong and durable, and can be readily installed without damage to stairways, walls and hardwood floors. They will not cause the floors to sag as is frequently the case with excessively heavy radiators. Owing to the uniform thickness of the rolled metal of which the sections are made, they will not crack from unequal contraction and expansion and thereby ruin hardwood floors, ceilings and expensive furnishings. They will withstand without injury, the freezing of contained water. The cutting out of valve seats by core sand and consequent leaking of valves is unknown when Pressed Metal Radiators are used.



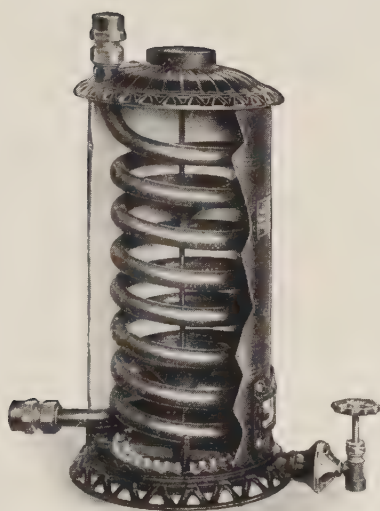
# THE HOT WATER HEATER



## Not a Luxury But a Necessity

**I**N TOUCHING on the subject of water heaters it will be necessary to remind you of the ancient methods of heating water, to have you appreciate the improvements that have been made in this particular line, up to the present time.

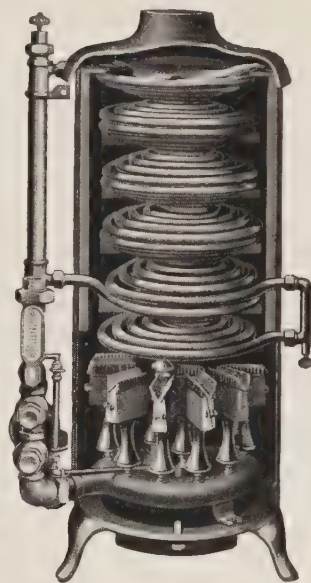
The longing for hot water comforts seems to have been inherited in the human heart, for we find that the cave man provided for his semi-annual bath by dropping heated stones in his hollow log tub, this being the first method of heating water. Our own forebears heated water in an iron kettle over the log fire in the open fireplace, graduating later to the kettle on the cook stove and then to the wash boiler. It was quite an advance when the idea was conceived to place an iron coil in the firebox of the cook stove and connect it to the small range boiler for supplying the hot water. The next step was the small gas heater to be connected



Single Coil Tank Water Heater

to the range boiler, which is still being used by a great many who do not realize the convenience of the most modern devices. There has been such an improvement in this style of a heater that reasonably good satisfaction is obtained from the latest improved *Tank Heater*, such as the copper coil heater in large sizes. The most efficient *Tank Heater* is the double copper coil Heater with Cast Iron Jacket. They are a very rapid heater and more economical than the small single coil heaters.

Notwithstanding the fact that hot water is the greatest necessity in the home, we find hundreds of homes equipped with one of the ancient methods of heating water and half the time only warm water is available. Such conditions exist because there are so many people who do not investigate the later devices, which would be cheaper for them in the end and so much more satisfactory.



Automatic Heater

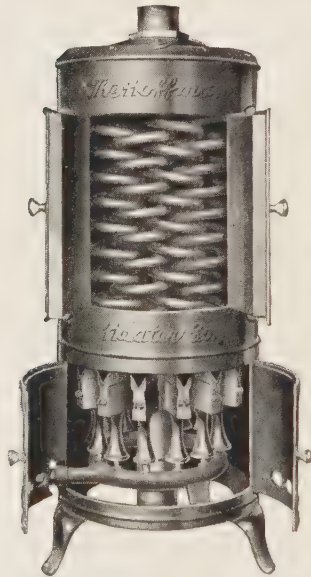
There is a great deal to be said of the latest improved devices for heating water which are the Instantaneous Automatic Gas Water Heaters equipped with automatic valves and Thermostat control, regulating the flow of gas to the burners in accordance with the amount required to heat the water to a desired temperature. When the water is heated to the temperature, the thermostat is set for, it automatically cuts off the flow of gas until the temperature of the water drops below this degree and then it opens up again and raises the temperature as before. There is no gas burning unless you are drawing water.

The heating surface of these heaters is made of heavy copper tubing, through which the water passes and is heated as drawn from the city mains direct to the faucet. There is no storage of hot water required. Just heat what you use. This copper tubing is surrounded by a double Cast Iron casing, leaving  $\frac{7}{8}$  of an inch dead air space between the two shells, thus retaining all the heat on the coils.



Cottage Heater

These heaters are made of high grade material and by skilled mechanics and with the proper care will last a lifetime. They are the best, and the best is always the cheapest. When you build a home you want everything good, as you may only build one home in a lifetime, so do not neglect the most important article in your house hold the *Hot Water Heater*, as there is nothing that adds so much to the health and happiness of a family as an abundance of fresh, clean hot water. Just turn the *Faucet* the *Heater* does the rest. Close the faucet and the fire is out, all except the tiny Pilot Light that is kept burning to light the main burners.



Multicoil Storage or House Heater

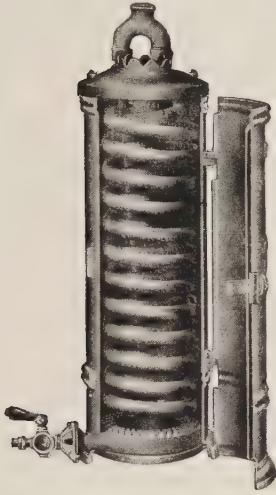
If a person has not seen one of these heaters in operation, they cannot realize the working of such a device. These Heaters are made in various sizes to suit the requirements of any sized home, from the small cottage to the mansion, and are usually placed in the basement, but in some instances are installed in the kitchen.

In regard to the size of heater to be used, it depends entirely on the number of hot water fixtures in the house. In a small cottage with one bath and lavatory, a heater with a capacity of from two to three gallons of hot water per minute is a sufficient size.

In a residence with three or four hot water fixtures, a heater of from three to four gallons of hot water per minute would be required.

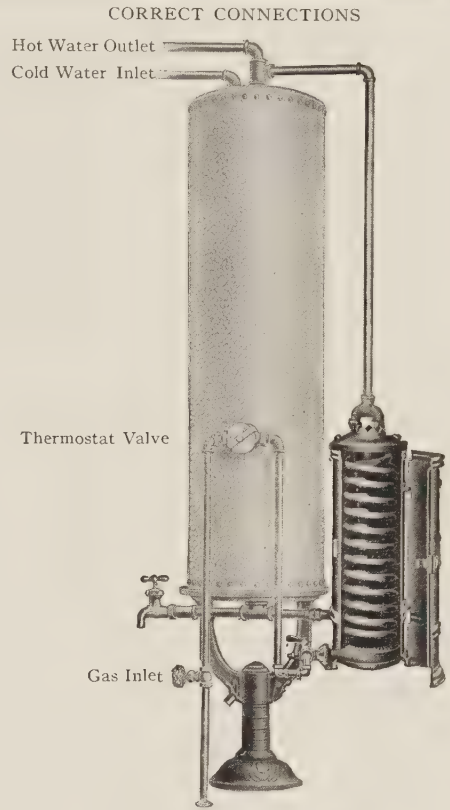
In a residence with four or more hot water fixtures, a Heater of from four to six gallons of hot water per minute should be used, and where a shower is used it is most satisfactory to use a large sized heater. You will never make a mistake by installing a large sized heater at any time, as they contain a larger amount of heating surface and will deliver the water quicker and at a less expense.



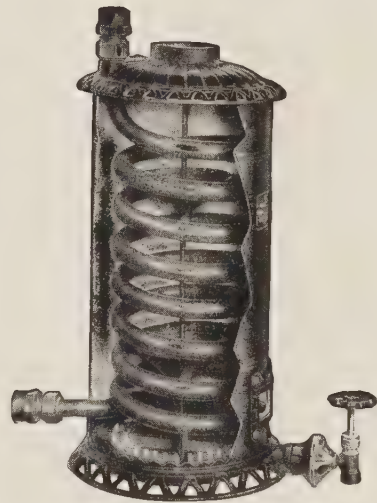


DOUBLE COPPER COIL TANK HEATER  
JACKET made of Cast Iron

COILS are made of 18 gauge Copper Tubing connected to a Brass Manifold at top and bottom with Brass Unions, making it easy to remove either Coil independent of the other.



This Heater has 22 ft. of  $\frac{3}{4}$  in. Copper Coil for heating surface, a Cast Iron Jacket and a very powerful Gas Burner. It is suitable to heat boilers ranging from 30 to 80 gallons in size.



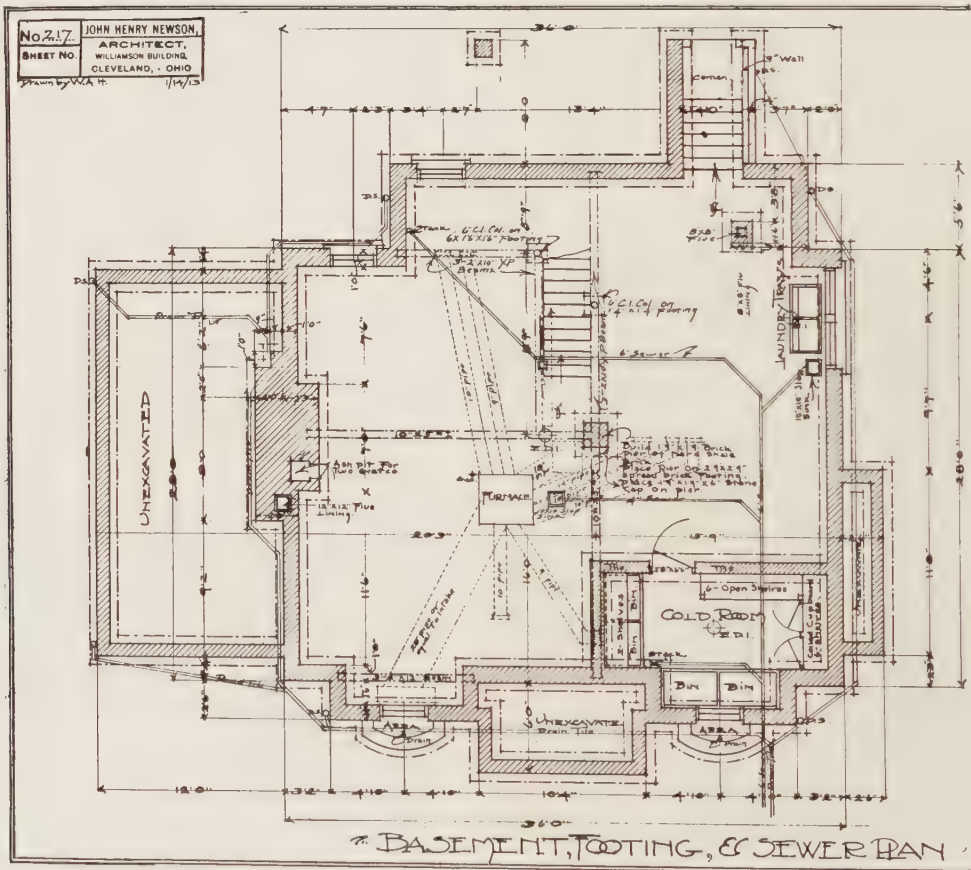
A TANK HEATER OF QUALITY

This Heater is constructed with a Polished Steel Jacket lined with Asbestos Board, Cast Iron Deflectors, Heavy Seamless Copper Tubing, Needle Valve with Nickle Plated Air Mixer, Brass Ground Joint Couplings, and improved Drilled Burner.

It has always been quite a problem to get a suitable heater for small apartments and flats. We find the most satisfactory means of furnishing hot water in such places is by using a cottage heater for each apartment installed in the kitchen. This arranges it so that each tenant pays his own gas bills which is much more satisfactory than where a central heating system is used in the basement to furnish hot water to each tenant at your own expense, as you will find so many unscrupulous people who will waste more than they use when they know that some one else is paying for it.

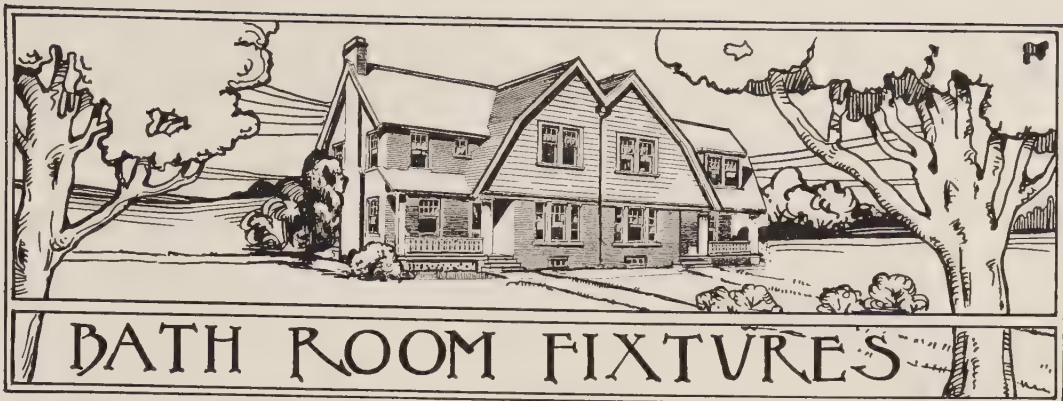
Where central heating plants are used, you will find the *Multicoil Coil Storage* gas heater, equipped with a Thermostatic Valve to regulate the flow of gas to the burners in accordance with the temperature of the water, the most satisfactory, as the Thermostat will shut the gas off as soon as the water is heated to the desired temperature at which the Thermostat is set to. Shut off the gas and as soon as the temperature of the water drops below where the valve is set, it will open up and permit the gas to flow to the burners. It works automatically and requires no attention after being properly adjusted.

These Multicoil Heaters are becoming very popular for house heating with hot water radiation and are found to be the most economical heaters to be used for heating with gas. They are automatic, being regulated by a room Thermostat, which shuts off the gas as soon as the room is heated to the desired temperature and automatically turns on the gas as soon as the temperature drops below this degree. No ashes, no dust, no coal. This is one of the greatest conveniences that can be added to a modern home.



Basement Working Drawing Showing Lay Out of Hot Air Heating Plant.





## Model Bathrooms of Character

By A. K. AITKIN of The Trenton Potteries Co.

**I**N PLANNING a home, architects endeavor to give character to it as a whole as well as to design each room so that it will impress one as having a certain definite character.

There are many homes, also, whose owners themselves have, by proper selection of decorations and furnishings, created in each room a distinct atmosphere.

Too often, however, the bathroom has been neglected.

Why should not this room be given an air of refinement and sanitation which will leave its impress on every one who enters it?

By the careful selection of fixtures and decorations, rather than by the costliness of the bathtub or by the elaborateness of the fittings, any bathroom can be given a tone both artistic and refined.

Perhaps you've never considered *your* bathroom a subject for treatment. Perhaps you've admired bathrooms in the elaborate homes of friends or strangers and did not consider that equally artistic and pleasing effects could be secured in your home, and at less cost.

True economy does not consist in buying cheap ware, but rather ware that will last and have the proper sanitary qualities.

We want to impress you with the fact also that it does not cost any more for labor to install a good fixture than a cheap one. The difference in first cost between the two is so small, compared to the long service and greater satisfaction of the better fixture, that no sane person will hesitate in choosing.

Two materials enter into the manufacture of clay bathroom fixtures—Solid Porcelain and Vitreous China.

Vitreous China is the most sanitary material imaginable from which to make plumbing fixtures. It is practically the same material from which your fine China table ware is made. It is strong, durable, impervious all the way through—of such a close nature that it passes the severe red ink tests of the United



THE SMALL HOUSE BATHROOM

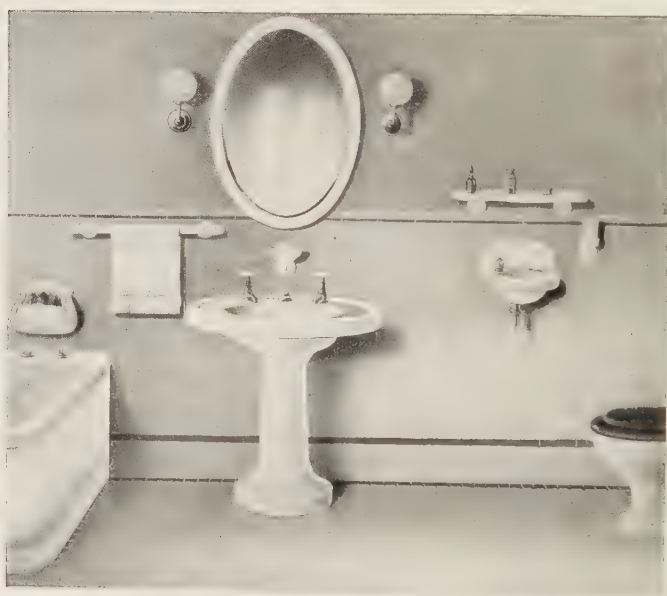
Showing fixtures which do not take up much room and are inexpensive. Courtesy of The Trenton Potteries Co.

## BATHROOMS OF CHARACTER



THE MAN'S BATHROOM.

Houses costing from \$5000 up can afford Bathrooms like this.  
Courtesy of The Trenton Potteries Company.



BATHROOM SHOWING ONE OF THE LATEST CONCEITS OF SANITATION.

An individual dental lavatory for cleansing the teeth.

Courtesy of The Trenton Potteries Company.



States Government. The highly glazed surface is pure white and will last forever with reasonable care.

The hard, impervious nature of Vitreous China plays a big part in household economics, as every housekeeper will find. Dirt and grease do not hold to its surface; it does not stain. Hence any scouring preparation you may prefer easily removes all dirt without scratching. The surface cannot peel because it is a part of the body, being formed on it by intense heat.

Because of the extremely close nature of its body, however, bathtubs cannot be made from Vitreous China successfully.

A coarser body of clay is needed to hold the great bulk together. This is found in our Solid Porcelain.

Both of these materials are unequalled for all household plumbing fixtures.

You, like every woman, pride yourself on the appearance of your bathroom. You scour and polish (or see that the maid does) until everything shines. But how about your kitchen—the place where all your meals are prepared? Are you proud to show it to your friends? Or has the once white sink taken on a permanent yellow hue in streaks and spots, with innumerable black scratches and mars? Perhaps you pass this over with an apology that “the girl hasn’t cleaned up yet.” Very likely she hasn’t and never will be able to clean *that* sink so you will not be ashamed of its appearance.

Now, just see how different would be the story if the sink were made of Solid Porcelain. There would be no excuse then if it were dirty, for Solid Porcelain is the easiest thing in the world to clean. The shining whiteness of sink and tubs gives the kitchen the appearance of cleanliness that should always be associated with the preparation of everything we eat. You would demand it in a hotel or restaurant kitchen; why not in your own?

And so we believe that, when you consider the matter carefully, you will agree with us, too, that sink and wash-tubs of Solid Porcelain are, for a good many reasons, the best possible fixtures to install in your kitchen. A few of these reasons we want you to consider carefully.

### SOLID PORCELAIN IS EXCEPTIONALLY DURABLE

Perhaps the first question that will come into your mind about the use of Solid Porcelain for a sink is, “Is it durable?” For years you have been used to the old iron sink, or the iron sink which has been coated with something to make it temporarily white. The thought never occurred to you that the right kind of porcelain, made hard and heavily glazed, could be more durable than anything you had been using. Yet, it is a fact that Solid Porcelain sinks, with reasonable care, will last a life time.

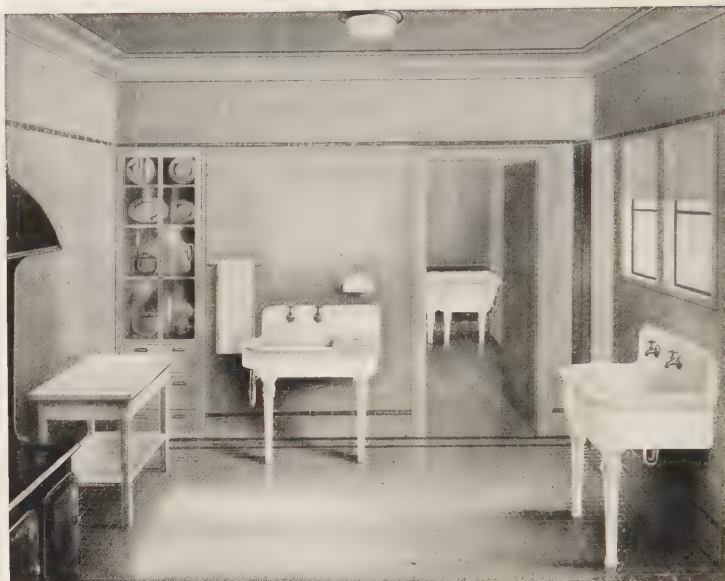
We wish every housekeeper—and the men folks, too—could take a trip through some of our potteries and see for herself just how our Solid Porcelain goods are made. She would find it a mighty interesting journey and a very instructive one, too, for it would open her eyes to the possibilities of Solid Porcelain in the making of sanitary home fixtures. Fixtures that are as durable as when made of metal (as you always thought they must be) and a whole lot easier to keep clean. Metal rusts or tarnishes and must be kept polished; Solid Porcelain usually needs but a wiping off with a damp cloth.

### THE FINISH WILL NOT SCRATCH

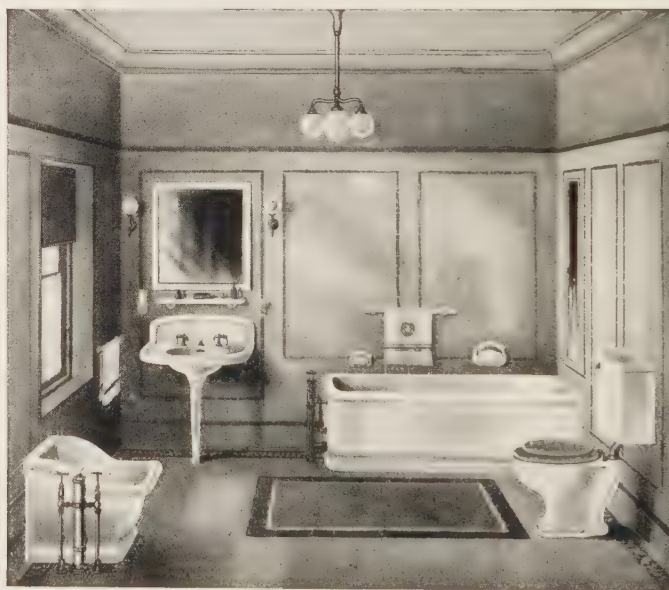
Pots and pans have to be cleaned, and everyone must use some sort of scouring material to cut the grease and dirt. We need not warn you to beware of gritty soaps, for the glaze on Solid Porcelain sinks is so hard it will withstand them all. *No other material we know of has a surface so hard.*

---

## BATHROOMS OF CHARACTER



SOLID PORCELAIN KITCHEN AND LAUNDRY FIXTURES.  
Courtesy of The Trenton Potteries Company.



A BATHROOM OF CHARACTER.  
Suitable for residences costing from \$5000 up. Courtesy of  
The Trenton Potteries Company.



The glaze will not peel off, either. If an exceptionally hard blow—and it will certainly have to be an exceptionally hard one—should chip off a piece of the surface, that is as far as the damage will go; there is no metal underneath to rust and no surface to peel.

#### YOUR MAID WILL FIND CLEANING EASY

There is another advantage in Solid Porcelain which has nothing directly to do with its manufacture, and yet it plays a big part in household economics. Every woman has had experience with the “servant problem.” We cannot tell her anything about it that she does not know; yet, one of the “grievances” so often brought up to the lady of the house, and assigned as the reason for the cook’s giving notice, is the hard work of cleaning. Everything that can be done to keep a good servant in these days of scarcity of help is a wise move. No one thing will make kitchen cleaning easier than the installation of an “Ideal” sink and tubs.

In the first place, they will not foul with dirt and grease. There are no joints, seams nor corners to collect dirt. Acids will not be absorbed by the glazed surface. There is no metal to rust and necessitate constant scouring to keep it clean and presentable. Such dirt as does adhere to the surface is quickly and easily removed with any scouring preparation you are accustomed to using, but without danger of scratching the surface of the sink and so starting the black and unsightly marking that sinks of other materials quickly acquire.

No girl will fuss about the cleaning of a Solid Porcelain sink or wash-tub. Slovenly Bridget can have no valid excuse for a dirty sink when it is made of this material. You will have effectively and permanently removed the principal source of “grievance” if you have such kitchen fixtures installed.

#### THE OUTSIDE AS EASILY CLEANED AS THE INSIDE

Another feature about Solid Porcelain fixtures is that both sides are glazed.

The highly polished glazed outside, unlike metal, is so smooth that dirt does not readily adhere to it, and a damp cloth used on it occasionally will keep it spotless; the inside may be kept just as bright by the use of a little soap and warm water.

When we talk about the ease with which kitchen sinks and wash-tubs can be kept clean, of course we have in mind the household in which there are servants. The same arguments apply even more forcibly where the lady does her own work. Every moment saved and every bit of work eliminated under such conditions is worth dollars to the busy housewife.

#### THE COST IS LOW

And that reminds us that you have probably gotten the idea somewhere, somehow, that a Solid Porcelain sink or wash-tub is for millionaires only. Perhaps it was the beautiful whiteness which suggested expensive luxury. Nothing could be farther from the truth than such an impression of the cost of Solid Porcelain fixtures. If you will compare their cost with that of other materials, you will see how wrong was your impression. And when you consider service and beauty, and all the other advantages of Solid Porcelain, you will readily admit that Porcelain kitchen fixtures are cheaper than those of any other material. All we ask is that you take the trouble to look into the subject a bit—ask your plumber or your friends that have them—and we are satisfied that there will be only one kind for your home—Solid Porcelain.

In summing up the advantages of Solid Porcelain ware, we find everything that is desirable to make your kitchen not only attractive and sanitary, but *economical*.

*First:* Durability—an ability to outlast any other material by many years.

*Second:* Attractiveness—a key to good housekeeping and an asset should you place your home at any time upon the market.

*Third:* High Glaze Finish—because of which, less friction and consequently less wear on the materials coming in contact with the Porcelain.

*Fourth:* The Cost—the actual ware itself is the only thing that costs more. The installation and fittings may be the same. Considering the above advantages, don’t you think it worth while to spend the few dollars now than later?

---



## The Need of Care in Brass-Goods

**W**HEN we take into consideration the fact that no house of today is really modern without sanitary plumbing, and the further fact that nothing adds so much to the rental or selling value of a house, the necessity of having the plumbing done in the best possible manner becomes of paramount importance. No one can afford cheap plumbing for two reasons: First, it will prove a constant expense; and second, if the work is improperly done, the comfort and even the health of the family, will be threatened by noxious sewer gases, and tapestries, paintings, rugs and wall decorations endangered by leaking pipes.

Fortunately all of these dangers and annoyances can be averted by merely selecting a reliable plumber and insisting upon the use of the very best material.

Plumbing is now possible in the suburban or country home, just the same as in the city, because of the introduction of private water systems which have been perfected to a high degree of efficiency. These are built in all sizes and are operated by either hand or electric power. Through these devices running water is available for any home regardless of a central pumping station.

The average home builder however, approaches the question of plumbing with many misgivings concerning the cost of installation and maintenance. This is due to an old misunderstanding of and prejudice against this particular trade.

The public has not realized yet the fact that the price of plumbing has decreased during the past decade or two. At the same time there has been a wonderful improvement in workmanship, while the merit and quality of the material is far superior. Twenty years ago nearly all piping was lead, and bath tubs were made out of copper, two of the most expensive articles used in metal working, while today iron pipes are largely used and we have the pure white enameled iron or vitreous ware bath tubs ranging in prices from \$15.00 to almost any figure one cares to pay. If it were not true that the cost of plumbing had decreased there would be but a small per cent. of home owners who would enjoy its blessings. As it is no home is too modest in cost to have its bathroom, lavatory, kitchen sink, etc.

The cost of the plumbing is about 8 to 10 per cent. of the cost of your home, while the brass goods run about 5 per cent. of the plumbing. The per cent. of upkeep expense of a plumbing system is very small in proportion to its cost as compared with a similar per cent. of upkeep expense in other parts of the house, such as painting, papering, re-decorating, etc.

Of all material entering into plumbing nothing is of equal importance to the brass goods, as they are the working part of the system. The pipes have but one function, that of carrying water between given points. They are subject to no wear from handling, but the faucets are handled every day, being opened and shut off repeatedly. It is



MUELLER  
Water Strainer



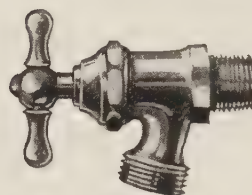
D-14401

MUELLER  
Pressure Regulator



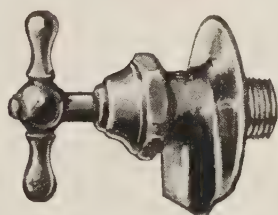
D-13160

Hot Water Boiler  
Drain Cock



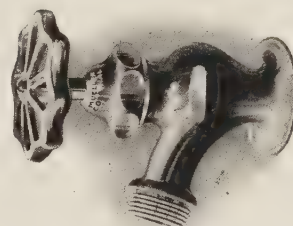
D-8716

"Outaway" Wash  
Tray Bibb



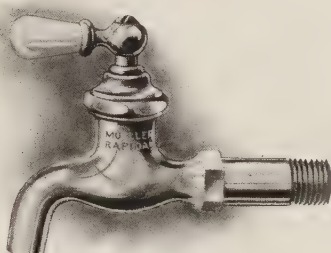
D-9072

MUELLER  
Sill Cock  
Wheel Handle



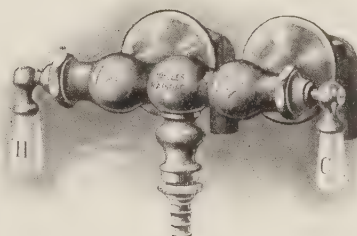
D-9021

MUELLER  
Rapidac Bibb  
Porcelain Lever Handle



D-9255

MUELLER  
Rapidac Double Bath Cock  
Side Handles



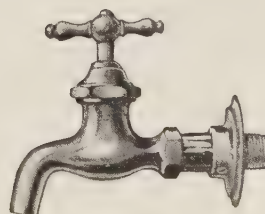
D-9477

MUELLER  
Rapidac Basin Cock  
Ball Top—Side Handle



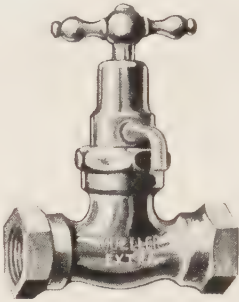
D-9463

MUELLER  
Extra Compression Bibb



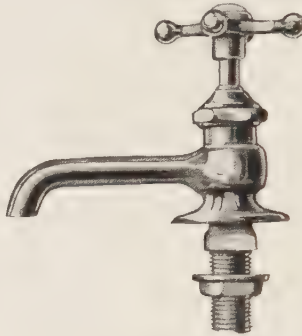
D-8407

MUELLER  
Extra Compression  
Stop and Waste Cock



D-8677

MUELLER  
Extra Compression  
Basin Cock



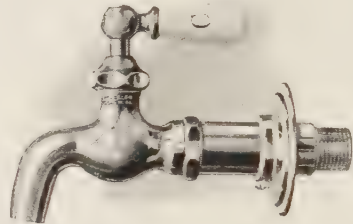
D-8763

MUELLER  
Colonial Compression  
Basin Cock



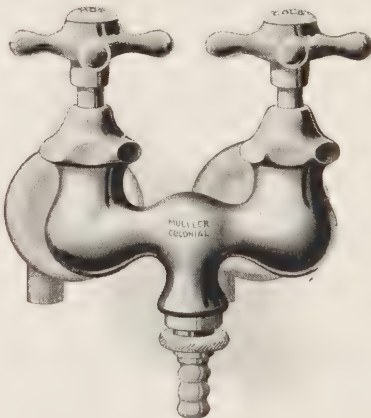
D-9046

MUELLER  
Colonial Fuller Bibb



D-10807

MUELLER  
Colonial Compression  
Double Bath Cock



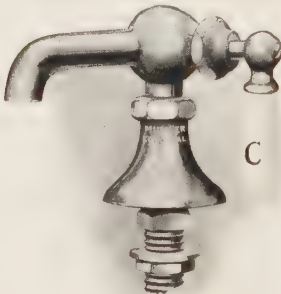
D-9055

MUELLER  
Colonial Fuller Double Bath Cock



D-10906

MUELLER  
Colonial Fuller Basin Cock



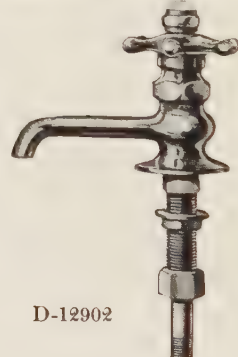
D-10892

MUELLER  
Colonial Self Closing Sink Bibb



D-12002

MUELLER  
Colonial Self Closing Basin Cock



D-12902



apparent therefore that brass goods, to render the most lasting and satisfactory service, must be of dependable quality. They are the least expensive in the long run. There is positively no economy in buying cheap brass goods. These are made from inferior metal which cannot be accurately molded or machined. This fact makes these goods more costly to install than those of high grade character. Owing to their imperfections the plumber consumes more time to fit them in place, and the cost of this additional labor must be added to the cost of the goods, which makes the total cost greater than high grade goods.

These inferior goods never will yield satisfactory service. On the contrary they will demand frequent repairs, and because of their flimsy character they will rattle and thump under pressure of the water, filling the house with annoying noises by day and night. The market is flooded with goods of this stamp which are wholly unfit for the purpose for which they are designed. It is goods of this kind you must give a wide berth. The fact that they are sold at a low price is sufficient proof of their unfitness. Expensive metals enter into the manufacture of brass plumbing goods, and no honest manufacturer can use these metals in the quantities required to produce a high grade article and then sell at the price at which cheap goods are offered.

The number of pieces of brass goods which your house will require is wholly dependent upon the character of the plumbing system you install, or rather upon the character of the house you build. If this be elaborate, with more than one bathroom, numerous lavatories, etc., more brass goods will of course be required. In many houses building today it is customary to include at least two bathrooms, lavatories in all bedrooms, and water closets on all floors, but the average house should contain about the following:

One water strainer.

One pressure regulator.

Two laundry trays in basement fitted with four bibbs, commonly known as faucets.

Hot water boiler with check valve, and sediment cock.

One kitchen sink with hot and cold water bibbs.

One lavatory in bathroom, with two basin cocks, one hot and one cold, with stop cocks on supply pipes below the fixture.

One lavatory in guest room with two basin cocks, one hot and one cold, with stop cocks on supply pipes below the fixture.

One bath cock for tub. Supply pipes for all the above fixtures, the supply pipes to be fitted with stop cocks below each fixture. These stop cocks, while frequently omitted, are highly important. They enable you to shut off the water at the fixture without interference with any other part of the system.

Stop and waste cocks on service pipes in the basement.

Sill cocks for the outside of the house.

Bibbs and basin cocks are made in several different patterns, namely:—Fuller, Compression, Self-closing and Rapidac; bath cocks in all but self-closing pattern.

Fuller work is operated by means of a lever handle, which pushes from or draws to the valve seat, a small rubber ball. It is popular in residences because it opens and closes easily and quickly.

Compression work is opened or closed by screwing up or down. It has a washer which comes in contact with the valve seat. This washer is encased so that it cannot spread. The only wear therefore is on its face, which comes in contact with the valve seat. Compression work is very durable and sufficiently quick in action for anyone.

---

Self-closing work closes itself when the handle is released. It can't be left open to waste water as any of the other patterns can. It is designed primarily for hotels, office buildings and apartment houses, where there is considerable use of water, but is desirable in homes, especially on hot water pipes where it prevents an unnecessary waste of hot water.

Rapidac is the newest thing in brass plumbing goods. It's a combination of the Fuller and Compression principles, having the quick opening feature of the former and all the durability of the latter.

Stop and waste cocks which are used in the basement are known as ground key or compression. With these the outside supply is shut off and the inside pipes drained to prevent freezing in extreme cold weather. The ground key pattern is generally used but the compression pattern is coming into favor. Either pattern will yield good service.

Sill cocks outside the house are for attaching hose, taking the place of hydrants. There should be one in front and one at the rear, or better still, one on each side. They lessen the amount of garden hose required.

The water strainer removes all grit and foreign substances from the water, thereby preventing its reaching and cutting out seats and washers in brass goods.

A regulator maintains an equal pressure in the house, regardless of the pressure in the mains. It prevents splashing at the fixture, absorbs the shock of sudden rises in pressure and prolongs the life of your entire plumbing system.

There are other brass goods such as ferrules, etc., which more directly concern the plumber, but these should be of undoubted quality.



No. 105 D—As built in Ohio. For floor plans see page 229





## The Vacuum Cleaner's Part in Health and Home Building

By F. W. EICHORN

**T**HE other day, while he was making a tour of inspection of the great institutions of learning in New York, Arnold Bennett, the English writer, who was then collecting material for his American Notes, which are published under the title "Your United States," turned to the gentleman who was acting as his guide and said, "All this is indeed wonderful, but I rather fancy you'd be a bit surprised were I to tell you of the one thing that has impressed me, perhaps more than any other feature of American life." Upon being asked as to what he had in mind, Mr. Bennett replied, "Well, I think it is the difference between your home life, here

and in England. In England we have many old and lovable customs, which I hope will continue to the end of time and which I miss to some extent here; but you, with your up-to-dateness, have taken into the home every labor-saving device, every convenience, every mechanical home brightener, and in fact every wonderful invention that you Americans are so adept in bringing out, and to what end and with what result? Why, to the end that your women folk are spared the old, grinding, soul-destroying drudgery. They have muscles of steel and nerves of electric wire do the youth-

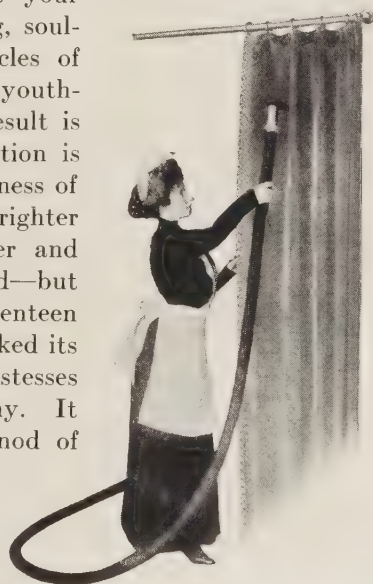


Cleaning Furniture

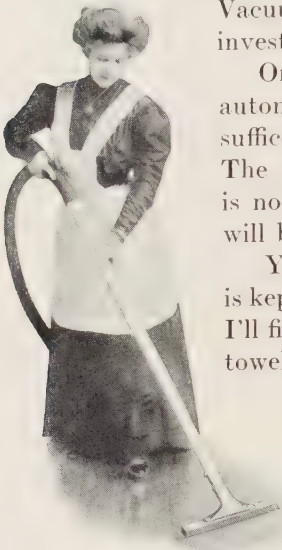
blighting, age-wearing work, and the result is that the energy developed by some central power station is helping them to postpone the wrinkles of care, the grayness of worry from work, never done. It has resulted in brighter homes and faces; cleaner souls and bodies; healthier and happier children; safer and more sanitary houses, and—but what more is necessary? Would you believe it—of the seventeen houses I have visited so far during my stay, not one lacked its stationary air cleaner, and many of my hosts and hostesses were not, by any means, what one would term wealthy. It was really remarkable!" He concluded with a slow nod of his head.

Mr. Bennett's mission to this country was to observe things in detail—and he *did* observe them!

I have been requested to write an article for "Homes of Character," dealing with the part played by the



Removing Dust From Draperies



Cleaning Rugs and Carpets

Vacuum Cleaner in Modern Homes, and a short resume of my investigations and studies along that line.

Only a few years ago, the question was often asked, "Is the automobile here to stay?" The same answer to that question would suffice were the word Vacuum Cleaner substituted for automobile. The Vacuum Cleaner is, emphatically, here to stay, and the time is not far distant when to be without an air cleaner in your home will be equivalent to being without a bath tub!

You ask, perhaps: Why do *I* require a cleaner in *my* house, which is kept spotlessly clean by my wife or my maid or my twenty servants? I'll first ask a question or two. Would you carry home a filthy roller towel from a public lavatory and ask your wife and children to use it?

Would you permit them to use a common drinking cup?

Would you take them to a house in which there was some contagious disease? I hear you say with great indignation,

"Of course not." Did you but know that by *not* being blessed with an efficient vacuum cleaner you are exposing your family and yourself to just such unnamable filth, you would be fully as vehement in demanding of the law that

it make the installation of such machines compulsory in all homes!

For it is a fact that has been demonstrated many, many times, and I will tell you just how you can prove it for yourself and to your own satisfaction. Ask your physician to get for you a Petri plate, which he can obtain from some institution of medical research or bacteriological laboratory, and which plate, by the way, is a small glass disc with an hermetically sealed cover. On the surface of the Petri plate is deposited a germ culture medium for the propagation of any microscopical life that may be placed in contact with the coating. Select a spot, preferably in the reception hall near the front door. Remove the cover of the plate and holding the disc, face downward, just above the carpet, brush the fabric so that the dust raised will fly all about and onto the surface of the plate. Examine the glass—it will appear just as it did before. Then replace the cover carefully, and lay your culture away in a dark, rather warm (not hot) place for a few days. Upon taking it out at the end of that time, you will probably see some irregular brownish-green and yellowish-gray splotches. Wrap the plate carefully, and ask your physician to send it to a laboratory for analysis. That is all! I can see a large interrogation mark, such as cartoonists are wont to draw, just above your perplexed brow. I'll tell you why. We have laws prohibiting expectoration in public places, which laws, sad to relate, are observed and enforced in a very desultory manner. You, your family, your callers, your servants, your tradesmen, are all compelled to walk upon the streets. You cannot watch and pick each footstep. Need I go further?

To my mind, the above is the one, all important, fundamental, paramount and overwhelming reason why an efficient vacuum cleaner should be installed in every home. Its installation spells sanitation and cleanliness!

There are other strong reasons too. One is that the *labor* of cleaning is reduced about ninety per cent., and that instead of playing "ducks and drakes" with the dust and dirt and shooing only a small portion of it out of the house, as is the case where the most painstaking and careful "broom" and "carpet-sweeper" cleaning (?)



Removing Dust from Radiators





Bedding Kept Dust and Germ Proof

day—the button on your desk by means of which you call your stenographer or book-keeper, and the hundred and one conveniences you have at your place of business. Then think of the one at home—think of what she does—what conveniences have you provided for her? In my estimation, this phase of the matter is worthy a few good, solid thoughts!

Next let us take the Vacuum Cleaner from a standpoint of economy—a saver of dollars and dimes. Do I see you looking up interested? Well I can convince you of *that* too.

After several years of experimentation, one of, and possibly *the* largest store in the United States learned that by systematic and regular cleaning by means of the “Air Process,” the life of their carpets (of which they had thousands of yards, costing exactly four dollars per yard) was increased or lengthened by fifty per cent. The carpet not thus cleaned had an average life of four years, while the carpets from which all the imbedded grit and sharp-edged sand had been regularly removed by vacuum cleaning gave promise of lasting two years longer. The air of our cities, and even in the country adjacent to the urban centers, carries with it infinitesimally small particles of sand, carbon and metal filings. These particles examined under a strong lens appear to be sharp, jagged chunks of steel, glass and rock. When this sort of a collection is matted deeply into the floor covering, and the pressure of one’s footsteps is applied above it, the soft fibre of the rug or carpet is ground against the saw-edges and the result is easily apparent the next time the “dust pan” or “carpet sweeper” is emptied. Note the fuzzy, woolly dust. Know what it is? It is simply ocular demonstration that your carpets are on the highroad to baldness—that instead of sweeping the dirt and grit from them you are—well, it’s about the same as trying to cure a sore throat by amputating a leg!

The Publishers of this volume, when they assigned to me the writing of this article, requested that I bring out the “good points” of the “Portable Vacuum Cleaner” as well as of the stationary type machine.

Inasmuch as I shall shortly make application to various Boards of Health in order to have the “small portable” suppressed as a public menace, I therefore cannot gracefully comply with the desire of the Publisher. My specific reasons are that I know of one instance where five families “chipped in” and purchased such a machine. One family had been visited by a case of scarlet fever. All

is attempted, every last particle is gathered—not in the air and on pillows, dishes and in lungs, but into the all devouring maw of a metal cleaning tool, then along a steel ribbed hose and down through iron piping to an hermetically sealed tank in the basement. As Shakespeare said, “*If t’were well done when ’tis done, t’were well t’were done quickly!*”

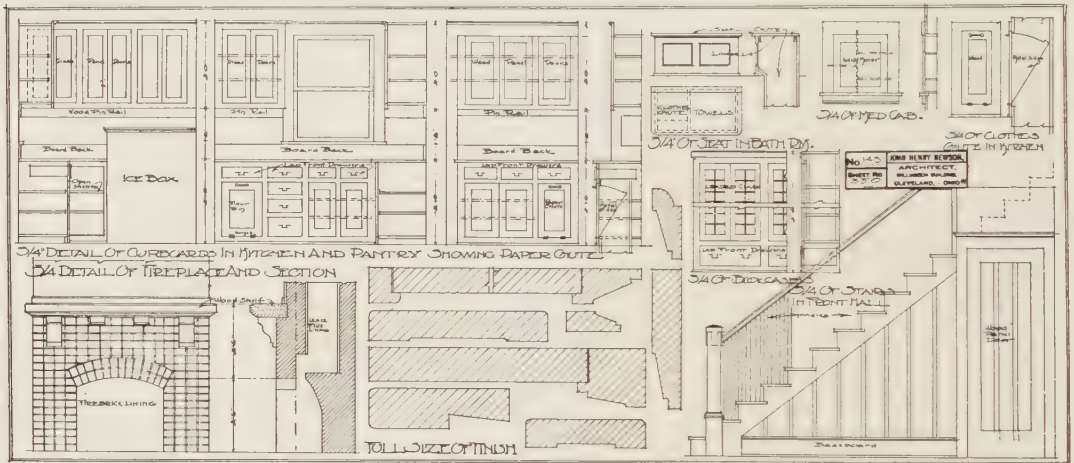
Next, think of your office fan, your desk telephone support, adjustable so that you need not tire yourself by leaning over to ’phone a friend and ask him out to dinner! Think of your office boy who saves you a thousand steps each



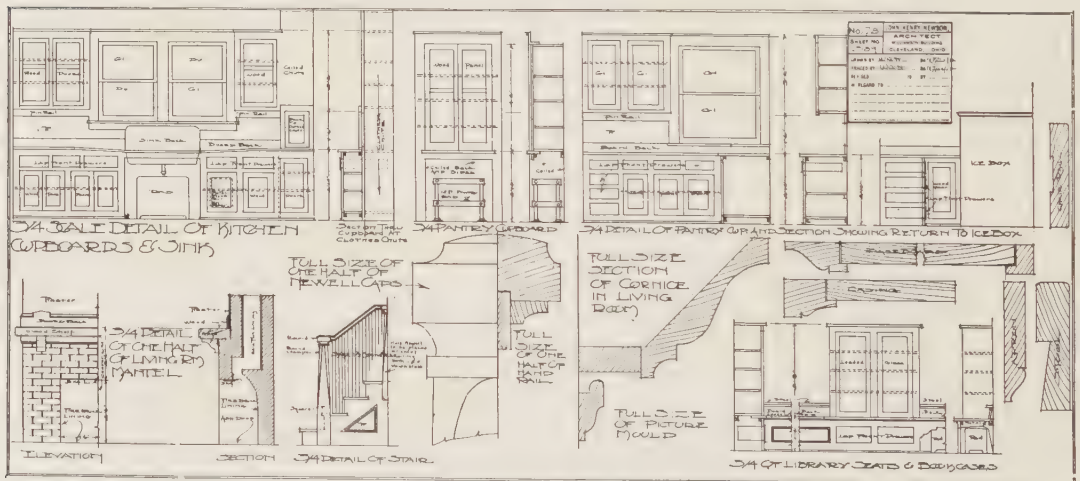
The Machine is Installed in the Basement

danger was supposed to have passed. Nevertheless, and in turn, each of the other four families contracted the disease. One user of the machine was a physician. His suspicions were aroused and he made an investigation. He discovered that the interior of that machine was a veritable hot bed of germs—some of which were coughed out into the room each time the machine was put in operation!

Try the "Petri Plate" experiment on your own "portable," if you have one. Even if it has never been used outside your own home. Hold the plate in front of the *exhaust* while you are operating the machine, and then follow the instructions for the proper handling of the culture as outlined elsewhere in this article. I could say much more regarding the small electric "germ spreaders" but space forbids. My advice is to take time by the forelock, and think of the Stationary Vacuum Cleaner as being the greatest necessity, the greatest convenience, the greatest health insurance you can possibly have in *your* home!



Detail Sheet from Working Drawings of No. 143 (Greatly Reduced)



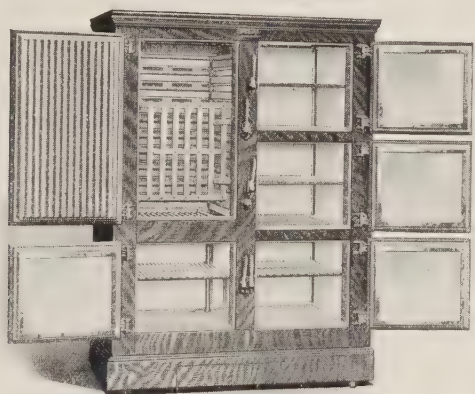
Detail Sheet from Working Drawings of No. 178 (Greatly Reduced)





## The Refrigerator in the Modern Home

**T**HE refrigerator is playing an increasingly important part every year in the economy of the modern home. The improvements in its construction, the new uses to which it is being put, and the growing appreciation of its importance have led it to be taken into consideration when the plans are drawn rather than as a mere afterthought when everything else in the house has been provided for.

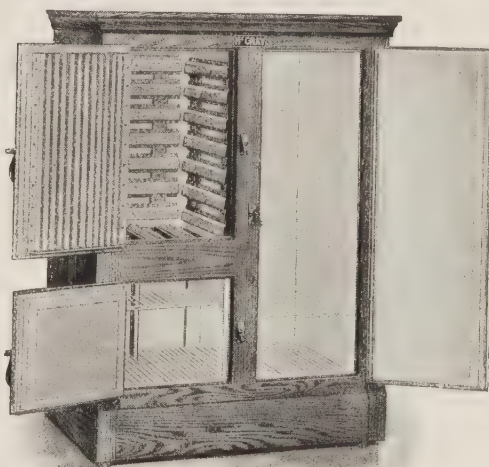


McCray Glass lined Refrigerator  
No. 470.

taken out and cleaned any time. The walls are constructed of two thicknesses of lumber combined with some insulating material, usually mineral wool.

By considering the refrigerator question when the house is being planned it is almost always possible to save a great deal of space and gain a great deal of convenience by having the refrigerator built-in. Several advantages may be obtained in this way. The refrigerator may be finished to match the interior trim which adds greatly to the appearance. It may be built in under a cupboard or into the wall between the kitchen

The first requisite of a refrigerator is absolute sanitarness. This is provided for by an easily cleaned lining of wood, porcelain, or opal glass, a scientific system of circulation, and a proper arrangement for drainage. In the best refrigerators there is a constant circulation of cold, dry air which keeps foods perfectly fresh and sweet and contains no moisture in which germs may develop. There is a water-sealed trap built into the floor so that it is easily accessible. The drain pipe is removable and may be

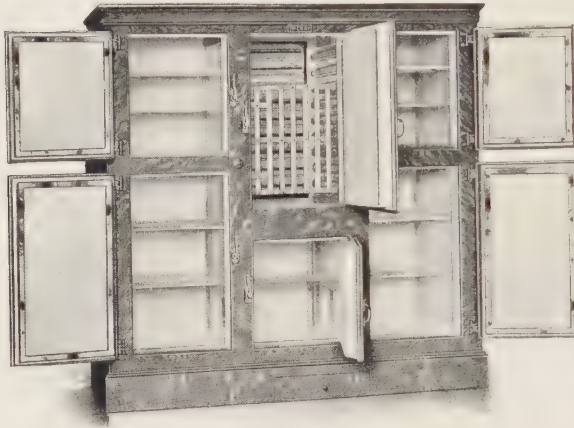


McCray Enamel lined Refrigerator  
No. 140.

and the porch so that the front only is in the kitchen while the balance is on the porch. In this way space is saved in the kitchen. Most important of all, however, is to have it arranged so that it may be iced from the outside. By doing this the iceman with his attendant dirt and muss is kept out of the kitchen. The refrigerator may be iced

whether any one is home or not. Then too, food may be kept cool in winter time by merely leaving the outside door ajar.

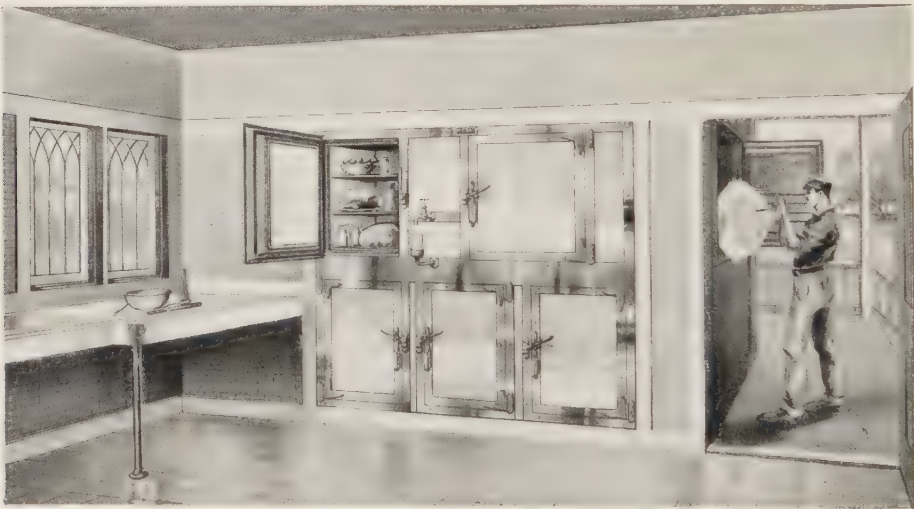
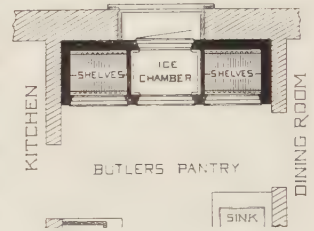
But it is a mistake to suppose that all this necessitates a built-to-order refrigerator. The smallest stock size refrigerator may be easily equipped with a side or rear icing door at very slight additional expense. By leaving space of the proper dimensions the stock size refrigerator may be just as truly built-in as though it were con-



McCray Glass lined Refrigerator  
No. 420.

structed to order. The floor plan shown, illustrates how this may be done. The best way to do is to write to some first class manufacturer for a catalog, decide on the refrigerator you want, and then provide for it in the plans.

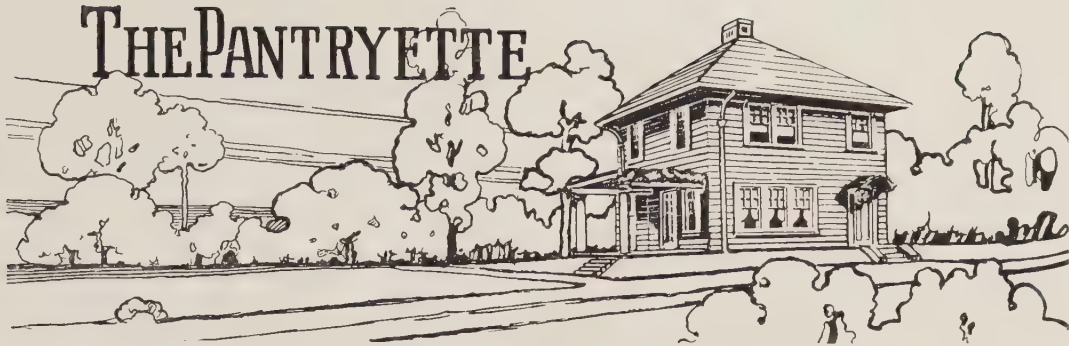
The illustrations accompanying this article illustrate some popular styles of stock size refrigerators and also show a built-to-order refrigerator arranged for icing from outside.



The illustration shows a McCray Built-to-order Refrigerator with the outside icing arrangement



# THE PANTRYETTE



## The Modern Scientific Kitchen

**T**O PLAN, build and equip the kitchen of a modern house, is a far different problem from that of even ten years ago.

In the beginning, kitchen and dining room were combined. Later when eating was transferred to a separate room, kitchens still were made large. In houses built a decade ago you will find kitchens so large that the daily work requires miles of walking.

In many such houses you will see along one side of the kitchen, rows of shelves built up to the ceiling, although no one was ever tall enough to reach the top shelf. There will be a kitchen table on one side of the room, making it necessary to carry everything from the cupboard to the table and back again. In the corner is a large pantry where the flour and sugar barrels are kept. Both have heavy lids, and one has to stoop to scoop up the contents.

No wonder women of past generations seldom left home. Their work never was done. Most of their time was spent in the kitchen. By the time the dishes for one meal were all put away it was time to prepare for the next.

The first marked improvement came a few years ago when the kitchen cabinet was introduced. With it began the new study of kitchen efficiency. We learned that large kitchens wasted time and money. We planned our stoves and sinks scientifically around our cabinets to save waste motion. We began to put business management into our kitchens.

The kitchen cabinet developed rapidly. It soon contained dozens of convenient devices, among them a sanitary self-sifting flour bin, sugar bin and many other clever things that helped save steps and time for the busy housekeeper.

Then came the idea only two or three years ago of combining our roomy old cupboards and big handy table of earlier days with the compact modern kitchen cabinet to put an end to all useless walking.

The kitchen cabinet has not much cupboard space—it simply has convenience. The old kitchen cupboard was full of much needed shelf space, but was vastly inconvenient without the cabinet. Neither the cabinet nor the cupboard has the proper table space. In the modern home of today the three are combined. In one of these up-to-date houses you could simply stand in one place and do practically all of the kitchen work without taking a single step.

The simplicity of the new plan is so surprising that one wonders why we have waited so long to use it. The old-fashioned cupboard is merely built deep enough to permit having a big hard maple table top fitted into it. This of course deepens the shelves and gives more shelf room. Then all the equipment so valuable in the kitchen cabinet is simply built into the cupboard.



Pantryette Unit No. 134



For instance, a convenient metal flour bin is in the top, large enough to hold more than a fifty-pound bag. The flour goes in at the top and passes through the entire bin. You take it out at the bottom thoroughly sifted. You never have any mouldy flour, dust or dirt. The pure white flour rests only against the clean metal, so smooth that no particle can cling to the sides—so tight that no moisture can penetrate. Your flour must stay clean. This bin is economical, not only because there is no waste from dust getting in but because the first flour in is the first flour out. There is no chance for the flour to spoil or spill. An air-tight metal framed panel of clear glass makes the contents of the bin perfectly visible. Yet this glass is arranged in a sliding groove so one can remove and replace the panel with slight effort.

The metal sifter of the bin is made detachable so it can be replaced. It is easily repaired and durable. From bag to bowl, the flour touches only this clean metal, making this kind of bin much more sanitary than the old style barrel or tilting box.

On the right next to the flour bin is built the big cupboard. Directly beneath, in space that formerly was wasted, is placed an ingenious sugar bin made entirely of metal like the flour bin. You put sugar in at the top and slide the bin back in place. You simply push a little lever at the bottom and the sugar runs out in a measuring cup. No scooping is necessary.

Between the flour and sugar bins, out of the way, yet right at your fingers' ends, is a revolving spice rack holding about a dozen crystal glass spice jars. This rack turns easily, bringing any jar to the front quickly.

The base section is fully as convenient as the upper section. There are three drawers down the right side. The lower drawer is a big metal bread and cake box. It is always out of the way and yet always at your fingers' ends when you want it. When you draw the box out, a flip of your finger slides the lid back in the cabinet, out of the way. When you push the box back the lid closes automatically and fits so tightly that not a particle of dust can get in. A metal cake tray is part of the equipment of the bread box. When you bake a cake you can put it on this tray to ice it, and set it away without disturbing the icing.

A sliding support, under the bread box, keeps it rigid and in a horizontal position when you draw it out, no matter whether the box is empty or filled. The lid and the box, as well as the support, come out so easily that they can be aired or cleaned with slight difficulty.

The top drawer in the base is divided into three sections for knives, forks, and spoons. This saves many trips to the sideboard. The divisions in the drawer are classified so you can get what you want without even looking into the drawer. The middle drawer in the base is for your dish cloths and kitchen linen.

Now notice how much room you have for pots, pans and kettles. A big cupboard in the base contains nearly 30,000 cubic inches of space. It is astonishing how many things you can keep in it. In the middle of the cupboard is a sliding shelf which comes out the same as a drawer. If you are sitting in front of the table you can reach down without getting off the stool, pull out this shelf with one hand, take off a pan or kettle, and push the shelf back out of the way. Thus an article that is at the very back of the shelf comes to the tip ends of your fingers.

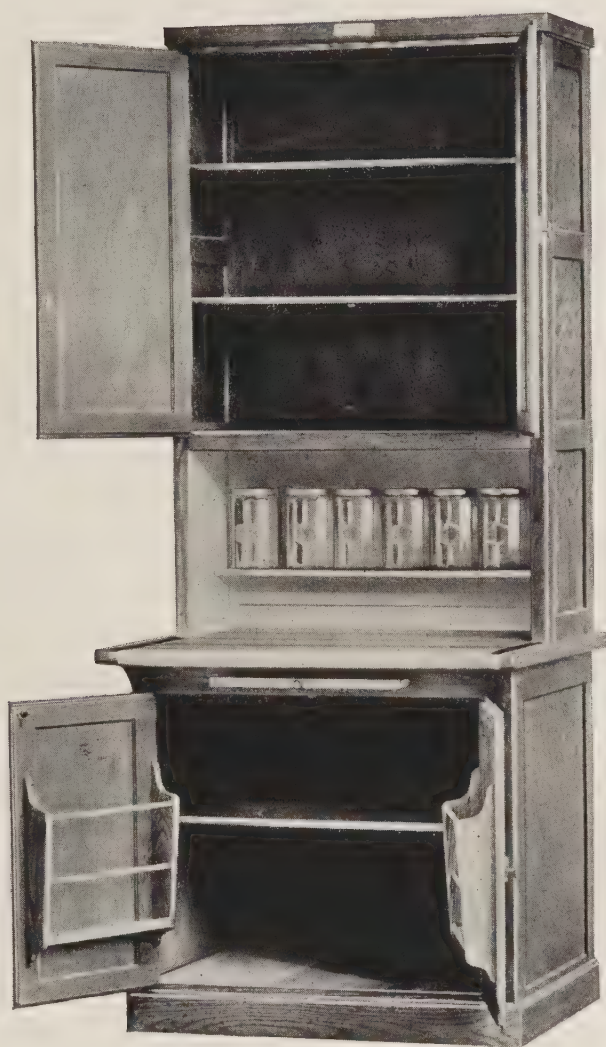
On the doors in front of this cupboard are placed two shelves with a rail in front on which you keep pie pans, lids and covers for pots and kettles. These are within easy reach of your left hand just when you need them.

---



Pantryette Unit No. 133





Pantryette Unit No. 132

The moulding board and the all-important work table are combined in the big hard maple table which occupies the space over the entire base section. This table is the center around which all the work turns. It contains more working space than an ordinary kitchen table: first, because it is larger; second, because everything is within easy reach and you don't have to clutter it up in the preparation of a meal. So you see this table top is not only roomier than the ordinary work table but vastly more convenient.

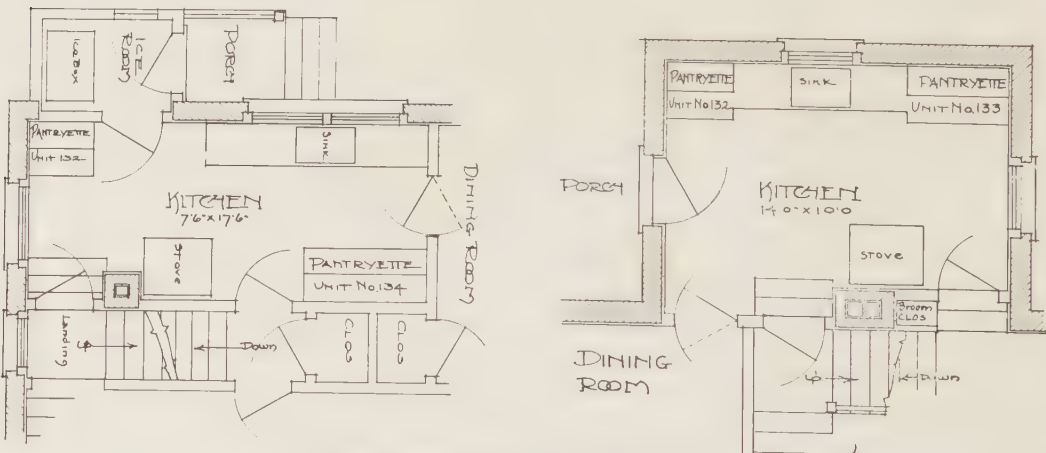
You can let sunshine and fresh air into every corner. You can get at every part easily to clean it. There is not a dark corner anywhere. There is absolutely no chance for vermin or dirt to accumulate. This insures that all your kitchen tools will be kept in a clean and wholesome place.

This new equipment for the modern kitchen is more than a collection of furniture. It is a work saving machine which gives you a model kitchen. In most cases furniture in the kitchen receives harder and more constant usage than any other. You use it six times every day, before and after each meal, 365 days in the year. You want it in perfect working order. It has to withstand the hard knocks, steam and changing temperature of your kitchen.

For that reason, equipment of that kind is made of oak, the most lasting of all materials. Other material could be used at less first cost than oak and a good many of these materials could be finished to look just as good as oak, but they soon warp and twist out of shape in the heat and steam of the kitchen.

The oak should go through a long seasoning process before it is used, and should be built up of three thicknesses, two thicknesses having the grain of the wood running one way, and in the center section with the grain running crosswise so panels won't warp or split.

These are little details that make for permanent economy in your kitchen. The biggest thing is economy of time. If you have built into your home a combined cupboard, kitchen cabinet and roomy table, bought ready to install, from a reputable manufacturer, you have at the lowest cost the basis of step saving. Group your sink, stove and refrigerator conveniently adjacent to this center of your work and you will save miles of steps. Your kitchen will be ideal.



Typical Kitchens, with Pantryettes built in





By JOSEPH E. MANNEN

**I**T IS wash day, and the wash has been hung on the line to dry. Suddenly a thunderstorm arises and there is a scramble to bring the clothes into the house. Meals are delayed and the whole order of the day is turned topsy-turvy. The rain continues throughout the day; and, as the clothes must be dried somehow, the attic, the basement or perhaps even the kitchen must serve as an impromptu dry-room. If the latter two are used, the exuding vapors penetrate to every nook and corner of the house; and, in any case, the accruing dampness cannot be eradicated in less than two to three days or even a week. The husband comes home dragged and wet from his work, only to enter a more clinging and clammy dampness in his house. His complaints and grumblings but serve to irritate the present uncongenial conditions. Besides, the whole family is in danger of contracting one of the many illnesses contingent on such conditions. This unwelcome state of affairs is not an unusual occurrence; but is for the most part a weekly and sometimes a bi-weekly occurrence during the winter months.

It is at such times that the family clothes dryer is truly a godsend to the perplexed housewife. True, you can send your wash to the laundry; but you, who know, realize that a laundry, ever so well regulated, does not give your wash the attention you desire. Moreover, there are some things that cannot be sent to a laundry; and likewise the

added expense would soon pay for a dryer of ample size. From the foregoing, we will undoubtedly agree that such an article becomes a necessary adjunct to the equipment of a modern home.

Further reasoning as to its necessity would seem useless. However, there are even greater features, which place it in the front rank of household conveniences. If in your office or shop, you can secure an article that will do the present work in from one-quarter to one-half the time now required, you would undoubtedly make use of such an article at once. Why not use the same

reasoning in your household. Modern invention and investigation has demonstrated that there is such an article for the household. A dryer equipped with a good ventilating system and built in a fireproof manner will enable the housewife to take care of her present wash in from one-quarter to one-half the time now required. It will do this work in equally as thorough a manner as when the clothes are dried outdoors in good weather. The clothes will come from the drying chamber just as white and fresh as when dried under the other conditions. In many cases, by enabling you to thus complete your washing and ironing in one day, it would do away with the necessity of having a wash-day for more than one day in a week. She is enough bother on one day. Isn't she?

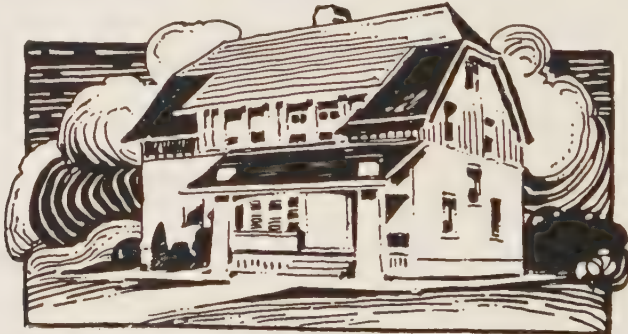




A Five Rack Drying Cabinet with gas stove attached.

Conservation of the waste assets is the modern slogan. In this regard, the laundry dryer is a pioneer. You must have a laundry stove in your laundry room. There is such a stove attached to every dryer. The same fire that boils your water and heats your irons, also dries your clothes. The heat that you would otherwise waste to the point of making a bake oven of your laundry room, is now used to dry your clothes. From the point of an economist there is no expense of upkeep, but rather a saving. You are now getting a two-fold use of your heretofore one-fold laundry stove.

Summing up the proposition, the dryer is an aid to married peace of mind; it is a preventative of disease; it is a saving of time and toil for the housewife, and lastly, it gives added value to your laundry stove. The time is here when a good drying system is as necessary to a modern home as is a good heating system. Think of this dryer as the greatest time saver, the greatest labor saver, and the greatest boon to the housewife, that the modern invention has to offer.







By J. J. RAUSCHER

**M**ODERN science and convenience has demanded the exclusion from the average home of that fatal pest—the house-fly.

It has been clearly demonstrated that diseases can be traced directly to germs which have been carried about through the medium of flies. Thousands of deaths can be traced directly to the effects of an open door policy as regards the house-fly.

Almost equally as pernicious in its endeavors is the mosquito. At certain times of the year plagues of gnats, bugs and other insects come down on almost every locality and cause discomfort and disease. Much is being done to eliminate the breeding places of these pests but it is doubtful if they will ever be successfully excluded.

Modern ingenuity has been battling with this problem for a decade and while it has evolved many interesting methods for the suppression of flies, mosquitos and other insects, the development has been equally as rapid in the furnishing of means of protection against those already in existence.

Screens properly made and adjusted are now regarded as the chief defense against the deadly house-fly. "Swat the Fly" is the watchword in many an American community, yet, as much attention is being given to his exclusion as to his utter extermination.

The fly outside of the house is infinitely less dangerous than the one in the house. A pound of fly screens is worth a ton of medicine.

Years ago little thought was given to the evil accompanying the advent of the fly each spring, but in recent times careful examinations have shown that a live fly is more dangerous than a bottle containing a dangerous culture of live disease germs.

Twentieth century methods are now being applied to this problem as to all others and sure and definite results are being obtained. Screens of all kinds, designs and qualities are now turned out in large quantities. Every opening in a building, regardless of its shape, size or arrangement, is now successfully screened at a minimum cost.

In purchasing screens, there are three fundamental considerations—protection, economy and appearance. In regard to protection the satisfaction provided by screens will, in a large measure, depend upon their ease of operation, the perfection of fitting, and the method of construction.

Economy in screens can be obtained only by long service. Such service is obtained where the best material is used and the screens are properly constructed. Ordinarily, the acceptance of the lowest proposal results in a temporary saving only. While ventilation and protection from insects are the prime functions of the screens, it is entirely feasible to secure a desirable quality of attractive appearance without any sacrifice of economy.

A variety of wire mesh is used, from the fine pin-head screens found in the Pullman cars to the larger mesh used for other purposes. Bronze and steel screens are, from the standpoint of economy, much preferable to the varieties which rust.

A number of companies now have patents on various fixtures used in connection with the manufacture of screens and are submitting unique contrivances which assist in maintaining the life and usefulness of these devices.

Screen frames are made from a variety of materials, wood, of course, being the one most commonly utilized. Care should be taken in ordering screens to see that a good substantial grade of wood is used so that the screens are not liable to fall to pieces in a year or two. Ordinarily, screens are subjected to severe weather conditions. Rains fall upon them and shortly afterwards the sun pours forth and if they are given to warping their life will naturally be much shorter than if they are constructed of some very durable material. Steel frames enameled or galvanized and frames of copper and bronze are also employed. Metal frames ordinarily furnish the best protection.

The science of screen construction has been brought down to such a fine point that in many cases they look more like bank fixtures than mere screens. Metal framed screens may be used equally as well, either on the inside or outside of windows and owing to the small sections of a metal frame, a larger opening is provided for ventilation and light than where a wood frame is used. Usually the frames are supplied in various finishes to harmonize with the building in which they are being placed. This feature, of course, is important to those whose pride concerning the appearance of their home goes beyond the mere prevention of annoyance from insects.

Many problems are met with in homes where windows are of circular construction. Sometimes it is necessary to screen in a tower room where the windows are curved and here the problem of getting a wood frame is quite a difficult one. Metal frames, however, lend themselves to this kind of an opening equally as well as flat ones and this is where they have the advantage.

The desirability of screening in porches and sun rooms has come to be recognized quite extensively during the past five or ten years and the result has been that large areas on porches are now so treated. Such a porch properly screened in can be used in the evenings equally as well as during the daylight hours.

One of the important things in having screens constructed, especially in the house containing a large number of windows, is the desirability of identifying them so that they may be placed back on the same windows they were made for. With metal screens, this can be done by stamping numbers upon the frames and then tacking a small metal number at the side of each window. With wooden frames it is often necessary to properly tag them so they will go back at the right opening.

On wooden frames springs are set at the edges so they will come in contact with the runners placed at the sides of the window. By springing the frame into place it can be properly adjusted on the tracks made for it and the springs will hold it fast and prevent it from dropping away. Similar devices are used in connection with metal frames. In some metal screens these springs can be adjusted by means of screws so that by setting the screw against the spring it is impossible to remove the screen until the screw is released. These devices in no way interfere with the raising or lowering of the screen but prevent its removal by carelessness or accident.

In houses containing casement windows the problem is often great as to how they can be successfully screened. Casement windows, for the most part, swing outward and the ordinary methods for screening such windows must be reversed. Manufacturers have met the problem by making screens which fit on the windows by means of hinges. While the casement window itself swings outward, the screen swings inward on its hinges. If it is desirable to open the casement window the screen is pulled open, the window adjusted and the screen put back into place. The whole operation is a convenient one as compared to old time methods. Of course, it is difficult to secure large wooden frames which will not sag, but metal frames are now made so staunchly that they can be depended upon to hold their shape when used on casement windows.

In building the new house, do not overlook the fact that screens must be provided for most of the openings. It is frequently the fact that the house builder does not take into consideration that screens are now an absolute necessity and must be provided for the modern home. They can be secured through the contractor or by direct agreement with some manufacturer. Their usefulness is becoming more apparent every day and the desirability of getting properly made screens cannot be too greatly emphasized.





## How Correct Shading will make your windows more attractive

By MABEL G. WOOLF

**M**ANY home-builders fail to appreciate the important part the windows play in the scheme of home decoration—do not realize how much the charm of their home depends on the attractiveness of their windows.

Or, realizing this, they give much thought to the selection of curtains and draperies, and then spoil the whole effect by choosing entirely unsuitable window shades.

As a matter of fact, the selection of window shades deserves as much intelligent planning and study as the selection of draperies. The shade should be considered as a background to bring out the color and design of the draperies, in exactly the same manner that proper backgrounds bring out paintings to better effect. Indeed, the freshest, daintiest curtains, no matter how lovely, will be spoiled in effect if the shades strike a sharp, jarring note in color.

It is really astonishing how very attractive the window can be made when its decoration is given a little thought and study. I have been observing the windows in the homes of several of my friends recently, and I want to tell you about a few windows which I thought particularly pretty. In every case, I was impressed with the important part the shade played in the scheme of decoration.

In one beautiful living room the windows were curtained with cream colored scrim, bordered by a shadowy leaf pattern in autumn green-browns. But the finishing touch was given by the shades, a beautiful mauve. In this same home I was struck with the pretty window treatment in the guest room. Creton curtain strips in deep cream, splashed with scarlet poppies, were wonderfully enhanced by beautiful shades in Ivory. And I have in mind



An attractive window scheme for the living room  
Courtesy of Chas. W. Breneman & Co.



A very charming window treatment  
Courtesy of Chas. W. Breneman & Co.



The open window shows the effect you can get with Duplex Shades — white outside and darker colors inside

Courtesy of Chas. W. Breneman & Co.

mind when selecting window shades. It is important that you get shades of **QUALITY**, of *permanent* beauty and durability. For there is nothing that mars the appearance of a well furnished room more than window shades filled with unsightly streaks and pin-holes, cracks, streaks and wrinkles.

You should avoid the ordinary opaque window shade. It is made of coarsely woven muslin with a "filling" of chalk and clay, and after a few months' use this "filling" cracks and falls out—the shade bags and sags, and becomes wrinkled and unsightly.

The ordinary Holland shade is just as bad. It is very flimsy, and in the day time does not afford your rugs and hangings sufficient protection from the glare of the sun. At night it shows shadows, which is certainly undesirable.

I have experimented with a number of different makes and kinds of shades, and have found that the most satisfactory service is given by shades made of closely woven cloth without that chalky "filling." Unlike the Holland shade, this unfilled shade always hangs straight and smooth, and does not sag and wrinkle. It shows no shadows and really shades, in the darker colors giving the same privacy you get from the ordinary heavy opaque shade.

It is obtainable in many beautiful tones—Ivory, Ecru, Mauve, Brown, Apple, Stone, Venetian Tile, etc.,—so you can secure just the color you need to harmonize with the color schemes of your rooms. It is also obtainable in duplex colors—dark on one side, light on the other. This does away with the annoyance and expense of two sets of shades. The inner side harmonizes with the coloring of the room furnishing, and the exterior makes uniform the outer appearance of the house. This shade is obtainable in any combinations of colors.

Most stores of the better class now have this unfilled shade, and it will certainly be worth your while to look for it.

another guest room where the windows were treated with white pongee curtains, finished at the hem with a fagoted beading, and shaded with apple green shades. The effect was indeed attractive. I was impressed also with the pretty color scheme in the dining room of this home; the windows were draped with short curtains of golden pongee; stenciled in green, and shaded with handsome Ecru shades.

But the color scheme is only one important consideration to keep in



The windows in this beautiful home are treated very artistically

Courtesy of Chas. W. Breneman & Co.





Though without draperies, the correctly shaded windows in this drawing room are very attractive

Courtesy of Chas. W. Breneman & Co.



A cozy corner.

Courtesy of Chas. W. Breneman & Co.



Residence of Carl F. Putman, Mt. Carmel, Ill., which is tastefully shaded

Courtesy of Chas. W. Breneman & Co.



A pretty guest room in a southern home, well lighted and shaded.

Courtesy of Chas. W. Breneman & Co.



Residence of S. B. Resor, Cincinnati, O. The windows in this home are very artistically shaded.

Courtesy of Chas. W. Breneman & Co.



By YALE

**I**N YOUR new home or business building you will use Locks and Builders' Hardware of some sort; that is certain.

You will probably be quite hurt if we ask you whether you have ever really thought what locks are for. They are not only for protection and privacy, but for that comfort which comes from a sense of security.

You cannot blame a carpenter or builder for using the least expensive locks and hardware which he can purchase when you pay him a lump sum for the house which will include these fittings. Rather blame yourself for not giving them the same thought that you will probably give to mantles and gas fixtures, papering and plumbing fixtures.

We suggest that you talk to your architect early about your locks and hardware, and he will advise you to visit one of the handsome exhibit rooms maintained by the larger hardware dealers who specialize on what is known as Contract Hardware, that is, the locks and hardware which are sold in large quantities on building contracts, and are usually made to order by the manufacturers from samples which the dealer can show you.

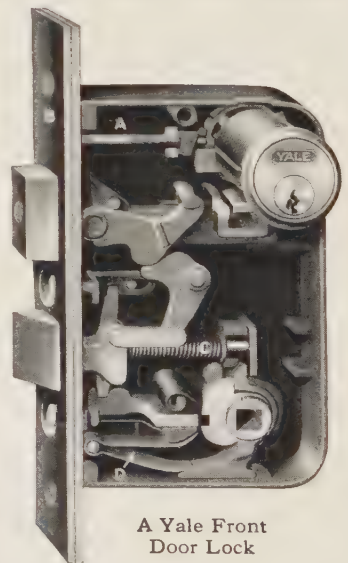
The difference in cost between something which will not only be a life long satisfaction, but give you "that sense of security," and something which has been placed on the doors because of its cheapness, is surprisingly little.

Home builders' are giving this matter ever-increasing attention, and we urge you strongly to take it up early.

Through the courtesy of the makers of Yale Locks and Hardware, we show herewith several of their leading locks and pieces of ornamental hardware in a number of schools.

Through their courtesy also, we make the following extract from a recent publication on the subject of the selection of locks and hardware.

"Among the 'pleasures of life' none is keener than the building of a home. Above all, as factors affecting the permanent enjoyment of the home, are the things which enter into its comfort and adornment, among which are included the numerous articles commonly designated as 'Finishing Hardware,' or simply 'Builders' Hardware.'



A Yale Front Door Lock





Egmont



Yatton

Sconset

FOR INTERIOR DOORS OF COLONIAL RESIDENCES  
Illustrations One-third Actual Size

---



Fairfax



Bristol



Easton



Chester



Dartmouth

COLONIAL SCHOOL  
Illustrations One-third Actual Size





Lorraine



Fontaine



Trianon



Jourdan



Lorraine

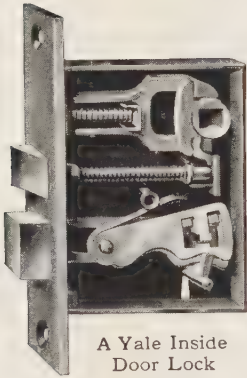
LOUIS XVI SCHOOL  
Illustrations One-third Actual Size



A Room in an Old Colonial House



Mission of San Juan Capistrano. California



A Yale Inside Door Lock

“The purposes of Builders’ Hardware may be classified under three heads, namely: Protection, Convenience and Decoration. As to each of these, the following suggestions are offered.

**PROTECTION:** The primary function of locks and hardware is to provide safe and convenient fastenings for doors and windows, in order to secure protection and privacy. Hence the best locks, the most convenient and reliable sash fasts, bolts, etc., should be studied and selected.

**CONVENIENCE:** American inventiveness has been exceptionally successful in furthering the convenience of the home by many minor mechanical devices. The Home Builder should investigate and avail of these.

**DECORATION:** No other expenditure for the home will yield a larger dividend of enjoyment, daily and continuing, than that for Builders’ Hardware, if intelligently made; the enjoyment of protection and security at all times, of quiet and convenience in the use of doors and windows, and, above all, of the pleasure always experienced when the eye rests on objects inherently pleasing or beautiful. Of these we have a wealth of designs, unrivaled in the world; in all schools of ornament, in all metals and in every finish.

**VALUE:** All values are relative, not absolute. Cheapness and best value are usually incompatible. The truer economy consists in an expenditure which, at a fair price, secures the ideal result, but this result can only be assured by the liberal expenditure of personal investigation, time and taste. These the Home Builder should be willing to devote, in view of the permanent satisfaction and enjoyment they will yield.”

In closing we make another extract from the extremely interesting and educational printed matter from the Yale Company. This in relation to the “allowance which should be made for locks and hardware.”



Rubian





“It is, unfortunately, a common error to allow too little money for Hardware and to virtually ignore the subject as requiring but slight attention. The importance of good Hardware, Hinges that will carry the door properly and Locks that will properly secure it, cannot be overestimated.

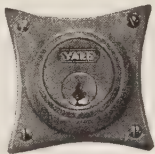


A Living Room in an American Home

much more may be expended as the equipment of the home suggests.”

For house costing \$	3,000.00	allow from \$	50.00	to \$	75.00
“ “ “	4,000.00	“ “	75.00	“	100.00
“ “ “	5,000.00	“ “	100.00	“	125.00
“ “ “	6,000.00	“ “	125.00	“	150.00
“ “ “	7,000.00	“ “	150.00	“	200.00
“ “ “	10,000.00	“ “	200.00	“	300.00
“ “ “	12,000.00	“ “	300.00	“	400.00
“ “ “	15,000.00	“ “	400.00	“	500.00
“ “ “	20,000.00	“ “	500.00	“	600.00
“ “ “	30,000.00	“ “	600.00	“	900.00
“ “ “	50,000.00	“ “	1,000.00	“	1,500.00
“ “ “	100,000.00	“ “	2,000.00	“	2,500.00

A table is given below which states the minimum amount which should be allowed for finishing Hardware. The Amounts are approximate and represent the smallest sum which should be allowed—excluding the rough hardware, such as sash pulleys, sash chains, sash weights, sliding door hangers, nails, etc. As



Dedham  
A Yale Colonial  
Design

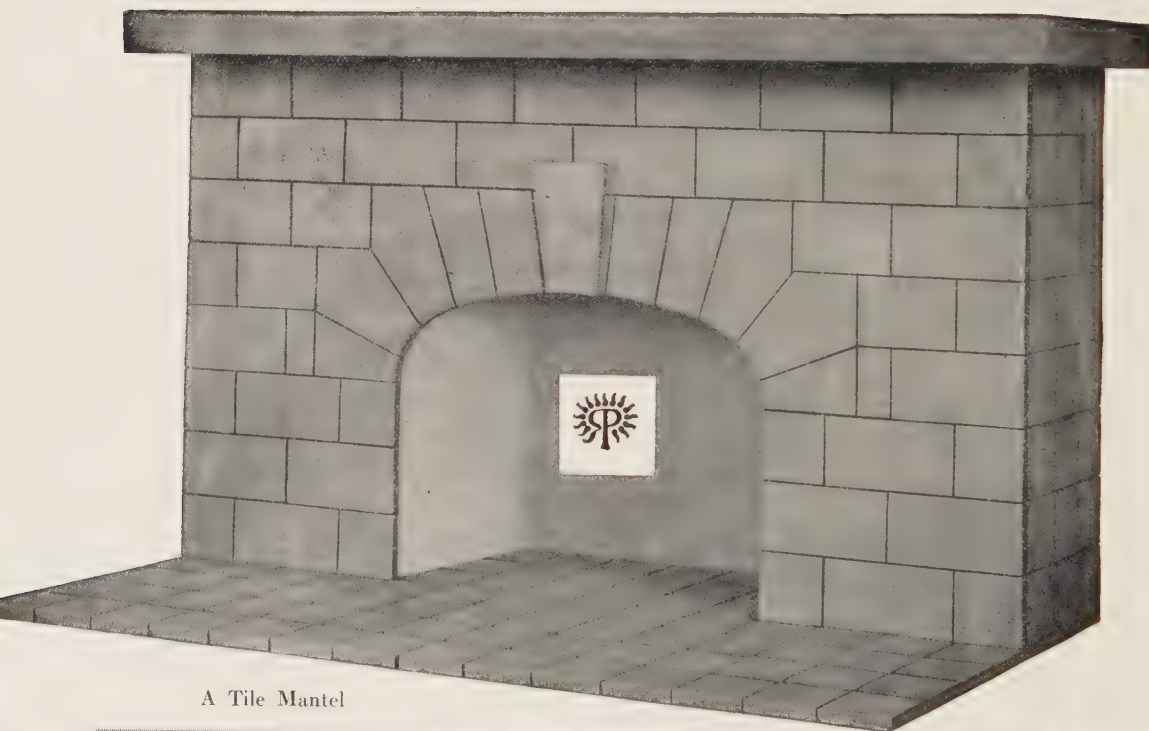


BY L. F. SHAW

Illustrations Courtesy The Shaw Mantel and Tile Company

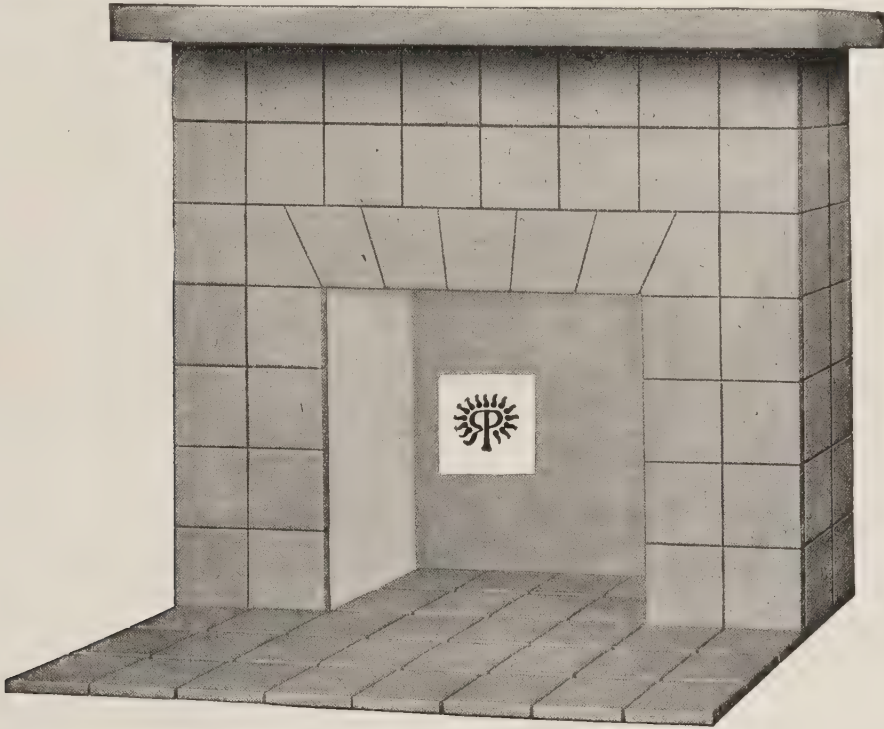
**S**CARCELY a home is built nowadays in which the designers fail to place a mantel or fireplace of some sort. Even unpretentious bungalows have their open fireplaces and mantels. Architects have learned that they can be installed at a comparatively small figure and that they furnish one of the most interesting and artistic touches in the home.

No one room is selected for this purpose. A mantel may be as much at home in the bedroom or bathroom as in the living room or dining room. About the only room in the modern house in which mantels are not included is the kitchen. This is rather



A Tile Mantel





A Tile Mantel

curious inasmuch as it is probable that the earliest fireplaces were constructed in the kitchens for the purpose of the cooking of food and keeping the home owner warm in the winter. In some of the interesting old homes in New England, as well as in many old houses in Europe, many fireplaces are to be found in kitchens. It is a fact, however, that modern ingenuity has evolved better processes for cooking food than at a fireplace.

Probably no material lends itself as easily to use in fireplaces and mantels as tile. It is only within the past twenty-five years that the art of tile making in America has been developed to its present high point of efficiency. Tile was used for hundreds of years in the European countries and can be traced back to the ancient dwellings of the Romans and peoples of their time. Within the past two decades, however, tile has come to be recognized as a very important element in the construction of mantels and it is the material pre-eminent for that purpose.

The reasons for using tiles about the fireplace are both sentimental and practical. Tile is a product of fire. It is fire-made, fireproof, and approximately associated with fire. It is a simple and effective treatment of what should be the most important spot in the room. It is the material that has been used about fireplaces for centuries.

The association of tiles with fire comes down through our German, French, Dutch and English ancestors, which, taken in connection with the great number of beautiful tiles offered for modern use, makes it almost absolutely necessary that the fireplace should have tiles.

For centuries the fireplace has been a necessity to mankind. Like all things which serve a useful purpose, it soon came to have a beauty of its own, as shown by fireplaces in old houses, some of which furnish the best models for today.

---

As modern methods of heating came into use, the fireplace fell into disuse. It was then resurrected as an architectural feature of the room, until now very few modern houses are built without at least one fireplace. In the large cities even some of the tall apartment houses are being equipped with real fireplaces, while all of them have gas-log fireplaces, which offer an equal opportunity for attractive treatment with tile. If anything should be honest, well constructed and serviceable, it is the fireplace. This is the focus of the home. The old Latin word for fireplace was "focus," the gathering place, where the rays of the family life met. It is the object most looked at by every member of the family every day.

As it is the most conspicuous feature of the room, it ought to be the most attractive. It ought to be decorated, and the decoration should be attractive. As people get back to an appreciation of the real natural beauty and beautiful necessity of the fireplace, the use of tile suggests itself as the only logical and natural treatment of the space between the opening and the mantel.

Tile offers every color scheme needed for the treatment of any kind of room. It lends itself to any kind of architecture. It can be as grand or as simple as you desire. It is always in good taste. And no safe and appropriate treatment can be used at less expense.

Wood should not come too near the fire. It must be separated from the fire opening in some way. There is no material that fits into this service so well as tile both from the point of view of utility and that of attractiveness. Utility includes a material that is unaffected by heat and also one that can be kept absolutely clean. Its smooth surface will not retain the dust from the ashes. It can be wiped off with a damp cloth and made absolutely clean and fresh. It keeps its color and is unfaded by the action of anything.

In appearance it offers in both texture, color and in the breaking of its surface by the lines of the tile, the most pleasing and harmonious arrangement that can be devised.

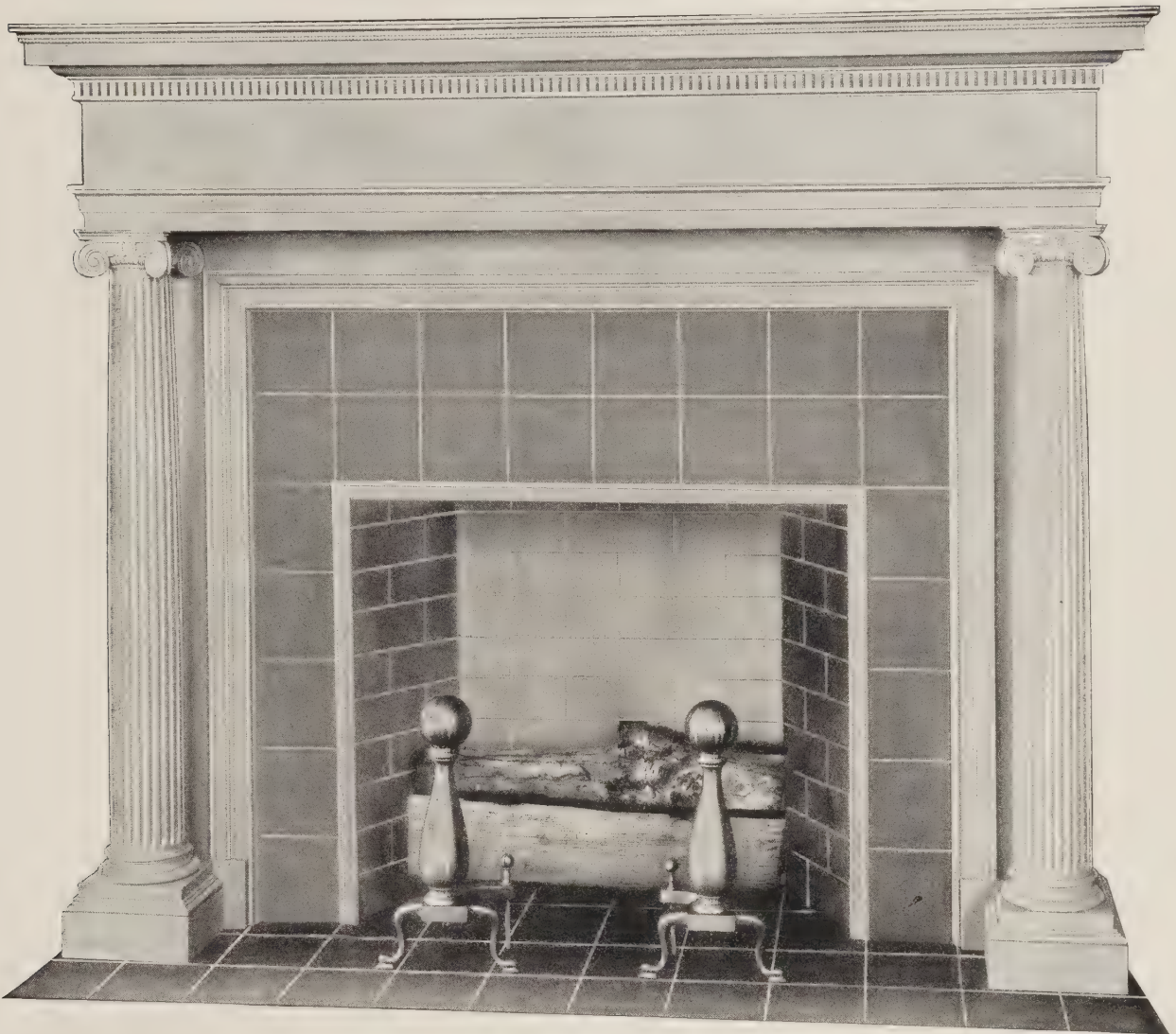
The colors that are offered in tile are legion. No matter what the color scheme of the room, you can select from tile either the harmonizing color or the contrasting color, and you can secure almost any shade of each color. For instance, in reds from the most delicate pink to the deepest terra cotta, in blues from the palest blue to the darkest ultra-marine, and so on.

Tiles are now offered not only plain, but also decorated in every way, meeting all tastes and representing every school of art, ranging from the simplest decoration to an elaborate design.

In addition to these, picture tiles are offered, giving nursery stories, familiar proverbs and other kinds of illustrations, for use in certain kinds of fireplaces. In brief, there is almost no desired combination that can be made from tile that cannot be bought in the open market.

In comparing tile with other material you should also consider the durability of tile. Tile is made from clay subjected to a heat of from two to three thousand degrees; it becomes vitrified in the process and the resulting material is absolutely imperishable. It is very difficult to break; so that a fireplace or anything else laid up with tile, properly cemented with the right kind of mortar, makes a solid and durable wall which will outlast any building in which it has been placed. This alone makes tile cheaper than any other material that you could use, even if the first cost were higher, but in the case





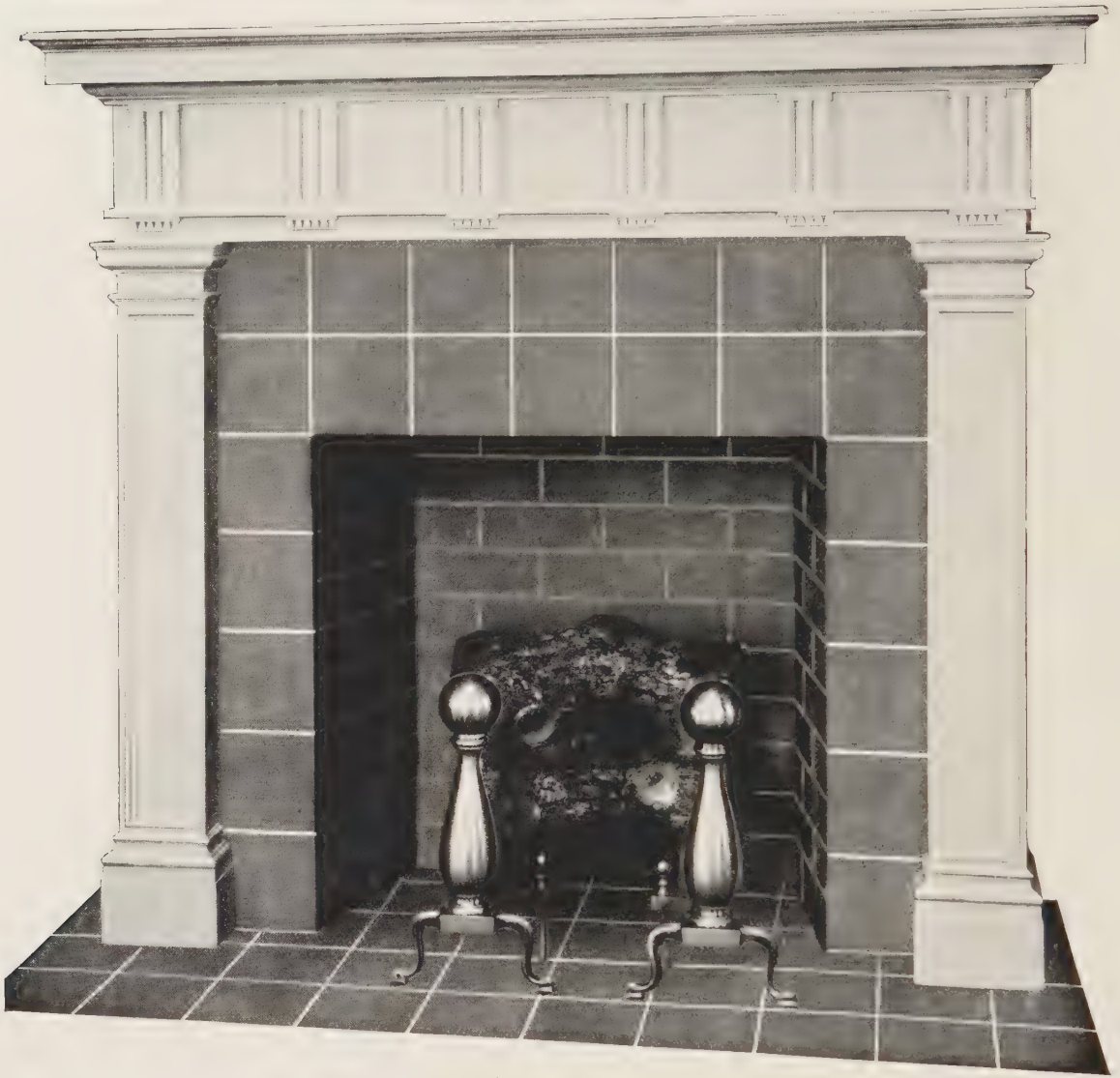
A Colonial Mantel

of tile both the cost of the tile and the laying is no more than that of other material such as plaster, concrete, brick, iron and other things that are sometimes used for the surface of the fireplace.

The chief cost in laying tile is the cost of labor, and the cost of labor is about the same no matter what material is used for facing the fireplace. You cannot, however, get such good effects with other materials as you can with tile.

If you want a fireplace that will be a lasting satisfaction you will give some thought to this question of the use of tile, investigate and find out what you can do and what it will cost before you do it.

It is always impossible to give exact figures about building, because both cost of materials and the cost of labor vary in various parts of the country.

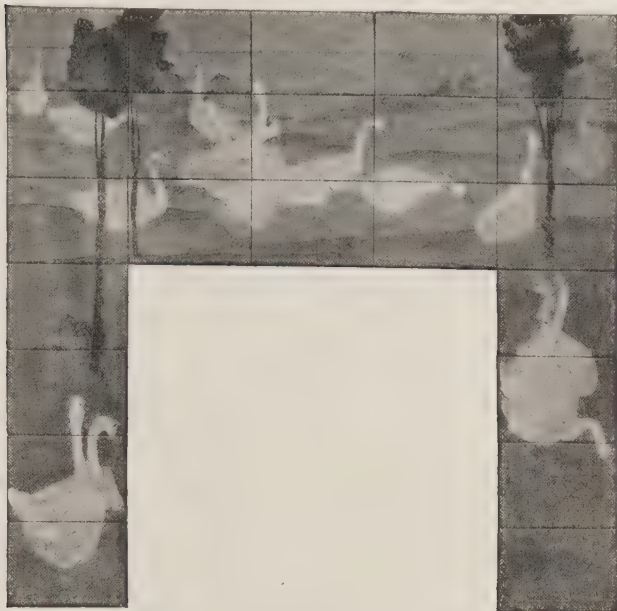


A Colonial Mantel

This is the thing for you to do. If you are about to build or rebuild, decide upon a fireplace, consult with your architect and then with your local dealer. Then get the estimates for your fireplace, using tile, and estimates for other materials; compare the two and you will find that nothing is cheaper than tile, just as you will find that nothing is better.

Remember that no substitute for tile will give the service or the appearance of tile; that all materials intended to take the place of tile and to look like tile, but which are not tile, are shams, are dishonest and will be a constant source of regret to you, and that the cost of even the best tile is slight, and that the labor of laying it up is no more than the cost of laying up other material.





A Special Designed Tile Mantel Facing

A fireplace all of one kind and color of tile makes an attractive feature in the room, but tile affords infinite opportunity for decorative effects. Scenic tiles, showing figures, objects and bits of scenery, harmonizing with the plain tiles, can be built into a fireplace with an effect that is a lasting source of pleasure.

Your architect will welcome the opportunity to use tile in beautifying the fireplace, and will be able to produce a fireplace as inexpensive or as costly as you please from various combinations of tile.

One of the rooms of the home which invariably gives comfort and enjoyment is the bathroom. Like tile mantels, the modern bathroom

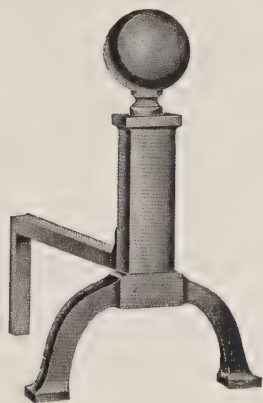
in America is a matter of comparatively recent development. Twenty years ago zinc tubs were used and a few years prior to that it was only the very rich who attempted the construction of a bathroom in the home. Nowadays the most humble dwelling has its bathroom, while bathrooms in the larger residences are veritable palaces, like those of the Romans.

Tile was long ago recognized as the very best material to be used in the construction of bathrooms and few bathrooms are now built in which it is not used to some extent. In many of them the walls and floors are lined with them, decorative schemes being worked out in different colors.

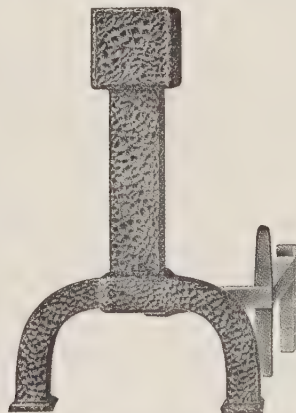
The use of tile for the floor and walls of a bathroom should be considered by everyone who is building a home or who expects to make alterations in his present home. There are few things which add so much to the real usefulness as well as to the appearance of a bathroom as a tiled floor and walls. The white porcelain tubs and lavatories of

the modern bathroom are now to be found everywhere. Tiled floors and walls are not so common. The same set of conditions that demands exposed plumbing demands the tile.

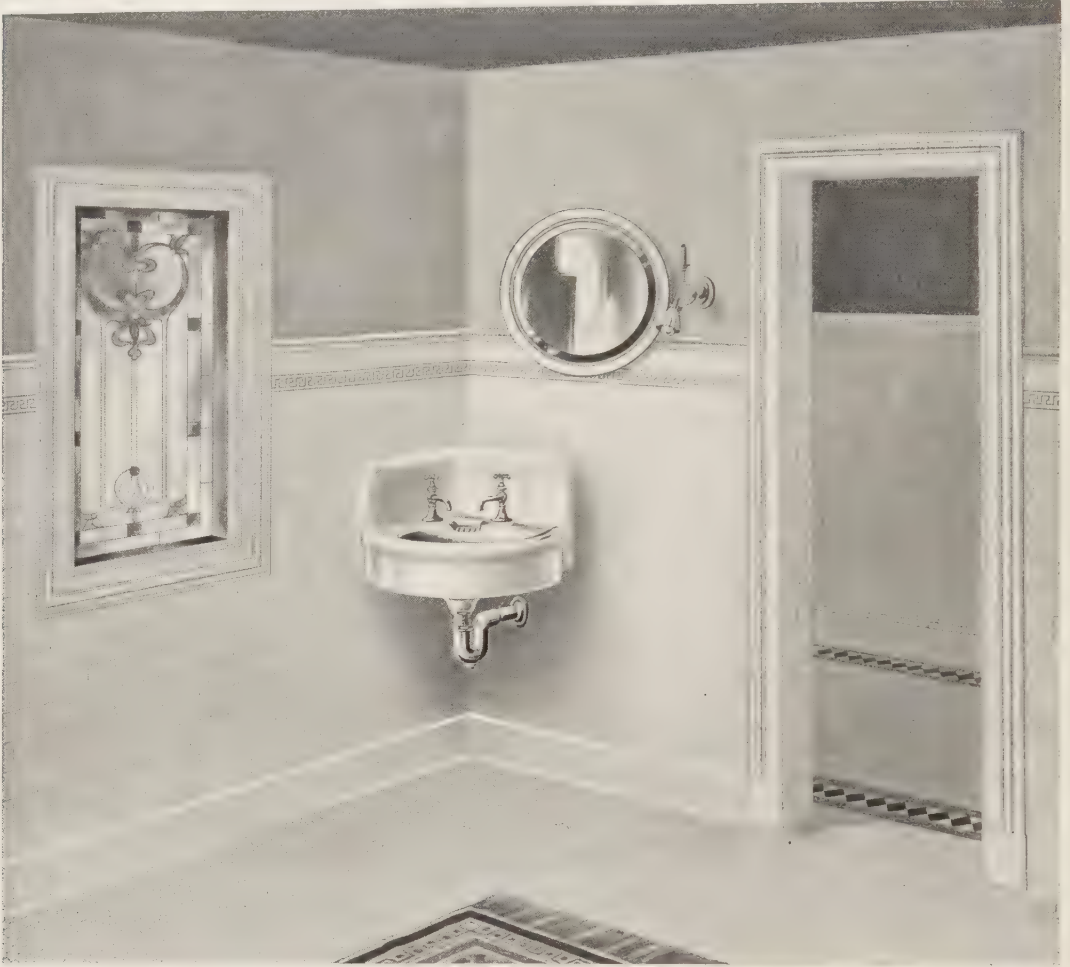
Boxed-up plumbing was abandoned because it was a damp, dark breeding place for germs. Painted tin tubs and marble wash basins, in which the bowl was imperfectly joined to a marble slab, had the same defect—crevices for dirt and disease germs. The smooth surface of tile affords no place for germs to cling. The whiteness reveals dirt.



An Iron Andiron



A Flemish Iron Andiron



A Tiled Bath Room

It is just as important that the floor and walls should be cleanable as it is that the fixtures should. A wooden floor absorbs moisture. The walls do the same. A wooden floor that is constantly spattered with water cannot be kept in a sanitary condition. If you could see the wooden floor of a bathroom under a microscope, you would be shocked. A wooden floor cannot be kept clean. Wooden floors are always dirty, and dangerously dirty.

The only impervious material that will meet all these conditions is tile. There is no material made that is so durable for floors and walls as well-made, well-laid tile. Marble, popularly supposed to be a hard material, wears out much more quickly than tile, and marble is not germ-proof. It is harder than marble, slate or other natural stone. It cannot be scratched by the steel nails of the shoe. It can be made in every conceivable shape, size and color, and lends itself to artistic and decorative treatment.

There are no substitutes for tile. All substitutes are subject in more or less degree to the conditions of wood. But the really important thing is that all of these substitutes cost more in the end than tile. Tile is the cheapest treatment for the floor and walls





An Iron Andiron

of a bathroom, because once correctly laid it lasts forever. It requires neither replacing nor repairing.

The idea of the white tile bathroom is the same as the idea of the white porcelain tub. Both not only are clean but look clean, which is just as important. If all dirt can be seen, it is very easy to keep the room and fittings clean. This does not bar the use of some color or tint to make the room attractive in a decorative way.

The usual treatment for the walls is white tile with a border tile in color, say green, or blue, which are colors that suggest cleanliness also and make a beautiful contrast with white. This, however, is a matter of individual taste, for many beautiful and artistic effects are obtained by the use of colored tile.

The best floor material is the small tile which may be had in various shapes. These are made in both white and color, which makes it possible to produce floors of every kind of color scheme, which are impervious to water, which will wear forever, and which are a delight to the eye. If such a floor is united with the wall by a cove base, making a curve from the floor to the wall, and then the walls finished in some one of the many attractive, white or colored tile, with a border and coping of some decorative design, the bathroom will not only be beautiful to look at and will not only last as long as, or longer than the house, but will resist every action of water or dampness in any other form, such as steam. It may be wiped off with a damp cloth, so as to be absolutely clean, and will have in itself all the associations of cleanliness so necessary in a bath room.

The cost of tiling a bathroom should not deter anyone from having such a bathroom. While the first cost is undoubtedly higher than the first cost of such treatments as wooden floors and plastered walls, the actual cost as measured by the up-keep makes tiling the cheapest thing you can use.

In the course of time the wooden floor of a bathroom, besides becoming a menace to the health of the family on account of the impossibility of keeping the floor clean, wears out and must be replaced. The same is true of the walls. No matter what the plaster is coated with to protect it from dampness, this coating is not effective as tile and must be replaced, so that in the long run, for daily use, your bathroom may be more cheaply tiled than treated in any other way. You should not lose sight of the fact that you use the bathroom daily; that, like the kitchen, it is the most used room in



An Iron Andiron

the house. Therefore, every precaution should be taken to make it a comfortable as well as a sanitary room. If all these things were given proper consideration, no house would be built that did not have at least one properly tiled bathroom. It is impossible to quote comparative prices, because the labor element varies so in different localities and is so large a part of the cost of a tiled bathroom. In some localities an average size bathroom can be completely tiled for as little as \$60 to \$70. Roughly speaking, a tiled bathroom costs from 50 cents upward per square foot for floors, and 60 cents upward per square foot for walls. But no matter what it costs in proportion to what you are spending on your house and in proportion to the other rooms, the bathroom is so important that it should not be the place where economy is practiced. Far better cut down expense in other lines, in the purely ornamental treatment of the house, in order to treat properly so important an essential a room as the bathroom.

The more prospective house builders look into this question of tile for the house, the more they are going to use tiles. No such satisfactory surface material can be secured in any other way. Before you build, take the plans for your bathroom to a competent builder and have the cost of tile estimated, compare it with the estimates for other treatments, and then ask yourself if the amount involved can be considered for an instant beside absolutely healthful, sanitary, delightful bathrooms.

In the building of the new home, the housewife usually dictates the method in which the kitchen is to be constructed and developed. It is her right for that is her sphere of action during much of the time she is at home. Science and invention is slowly but surely eliminating much of the drudgery in the modern home and the next few years will see even a greater development along this line.

One of the things, however, which will do much to eliminate dirt and consequently reduce worry, is the generous use of tile in the kitchen. It is one of the newer developments in home building but it is nevertheless recognized as one of extreme merit.

A really good treatment for the walls and floors of a kitchen or laundry is tile. This may seem quite new because the use of tile for these rooms is not so common in this country as it is in older countries where they have learned how to do things better.

In Germany every kitchen is tiled, not only the floors but also the walls, sometimes all the way to the ceiling. This is true also in France, England and Holland.

A tiled kitchen is beautiful, but its attractiveness is not the strong argument. The real argument in favor of tile is health—the health of your family.

Most people learned a long while ago about the importance of cleanliness in the bathroom and the kind of equipment and surface treatment that made cleanliness imperative.

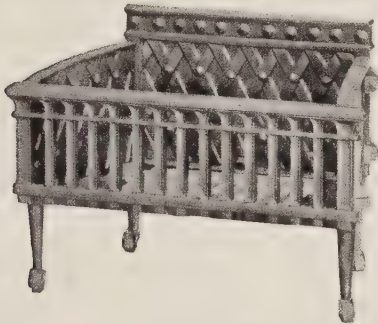
Now comes the question of the kitchen. There are greater sources of danger from the kitchen than from the bathroom. Floors and walls that absorb steam, odors of cooking, grease and other things necessary in preparing food in any kitchen, create and harbor germs which are dangerous to the health of the family. There is only one material with which you can cover the floor and walls of your kitchen which is absolutely impervious and which is practical to use as a surface covering, and that is tile.



Tile has a glazed surface which is absolutely impervious to moisture of any kind, which can be easily wiped off and made, not merely apparently clean, but absolutely clean. The labor of taking care of a kitchen is reduced to a small fraction of what is required with the old kind of walls, and at the same time, the kitchen is actually cleaner, pleasanter to work in and more satisfactory in every way.

Everything that applies to the kitchen applies to the laundry. In both there must be a great deal of steam and dampness. Dampness is a source of ill health. It is impossible to keep a wooden floor, or a floor covered with any of the substitutes for tile, clean and dry. Only a tiled floor is clean and dry.

It is only because we are not in the habit of thinking of tiles for the kitchen and laundry that all kitchens and laundries in this country are not covered with tile. If you will insist on tiles for these purposes, it will be one of the best investments you ever made. The whole idea of a house is a place to live in. An important part of the house is the kitchen where the food is prepared. If the kitchen is not clean and well kept, the whole household suffers. It is really one of the most important rooms in the house. It is not enough to provide a good range, a first-class refrigerator and modern cooking utensils. The room itself must be good.



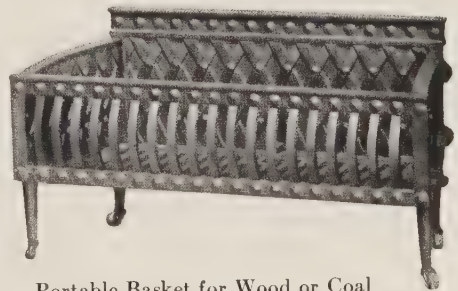
Portable Basket for Wood or Coal

It is not exactly a modern idea to have a tiled kitchen, although it is modern in this country, because tiled kitchens have existed for hundreds of years in the older countries. This is one of the best features that the ancients have handed down to us. Even the kitchens of old Pompeii were tiled.

Tiled floors and walls are scientifically clean. They are germ-proof. They are impervious. They can be kept clean with little difficulty. They cost less in the long run than any other treatment. They are very attractive. They are intrinsically appropriate for the surface of a room in which cooking is prepared, or in which washing is done. They offer an infinite number of color schemes and decorations to please every taste, they harmonize with every kind of architectural construction.

In these days, when attention is constantly being centered to the development in home building, the fact is becoming apparent that before long the fireproof home will be the one in most demand. Invention and development of fireproof material is directed toward this end and there is scarcely a week goes by in which some new invention is not brought forth. In buildings costing more than \$4,000 or \$5,000, architects tell us that fireproof materials are cheaper than wood or combustible materials. This even applies to the construction of porches and terraces. In many large and ambitious homes it has been employed for the construction of porch floors for some years. Fireplaces of tile are also to be found on these porches which may be closed during the inclement weather.

As you step from the walk or lawn to the porch of your house one of the materials that seems to be most natural for the covering of



Portable Basket for Wood or Coal

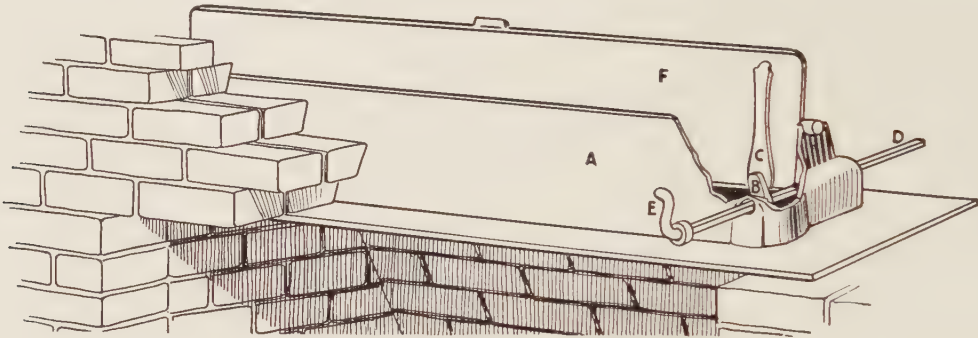
the floor is tile. Tile is related to the earth. It is made from clay, subjected to tremendous heat until it becomes vitrified, but still its source is the earth. Therefore, it is a natural connecting link between the house and garden.



Flat Throat Damper

The idea that tile costs more than wood is true only as to the first cost. A tiled floor once laid lasts indefinitely. A wooden floor will wear out in time, exposed as it is to weather. A tiled floor requires no treatment after it is once laid. A wooden floor has to be painted and repainted more frequently than any other part of the house. A tiled floor offers more attractive colors than can possibly be obtained by the use of paint upon wood.

It is not only the color of the tile that is attractive; it is its texture. It is not only pleasant to look at; it is pleasant to walk upon. It suggests coolness in summer when porches are most used.



Miller Throat Damper

It has been used for the floors of porches, entrances, vestibules, loggias and terraces from time immemorial. Tile is one of the oldest building materials made by the human race, and it is today one of the best.

A porch should be attractive, it should be a comfortable retreat for rest and recreation. Its accessories should help to this effect. The cool, inviting texture of a tiled floor is one of the first means to this end. The change from the house to the garden is made less abrupt by the use of tile, a material so akin to the earth.



Ash Dump

A porch must be kept clean. It needs constant rubbing. A wooden floor cannot be scrubbed as clean as a tiled floor, and it takes longer to dry. A tiled porch floor can be made absolutely clean. It can be flushed off with a hose any time. It is easier to sweep on account of its smooth surface.

There is a constant tendency towards the decreasing the cost in the installation of tile of all kinds and a brief review of present prices will not be amiss. At this time tile



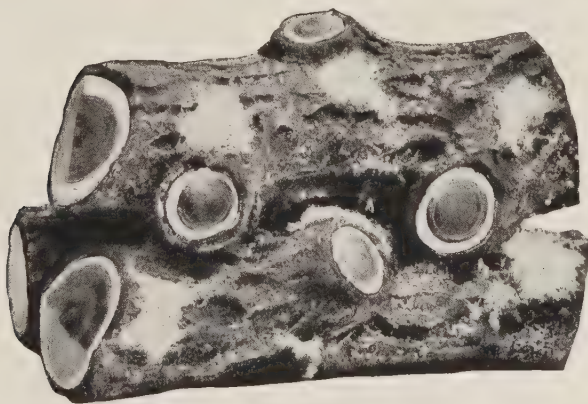


Mantels from Architect's Designs

floor can be set in beautiful designs for from 40 to 60 cents per square foot. Wainscoting can be set for from 60 to 75 cents per square foot. Many beautiful designs in tile mantels are now available and these may be procured all the way from \$50 to \$100, although wood mantels containing generous portions of tile may be purchased for as low as \$25.

Intimately connected with mantels and fireplaces are the accessories which go with them. These include, of course, andirons, fire baskets, fire sets and other accessories to be found in connection with any modern fireplace.

A development of the past few years is the gas-log constructed of fireproof material in the image of oak, birch or maple logs. These logs are fitted with mixers and burners and the gas percolates out across the surface of the log through small holes, filtering its way up through the crevices in a very close imitation to natural flames. These gas-logs can be procured all the way from \$5 to \$15, and where natural gas is available are a very handsome and useful feature of a fireplace.



Gas Logs

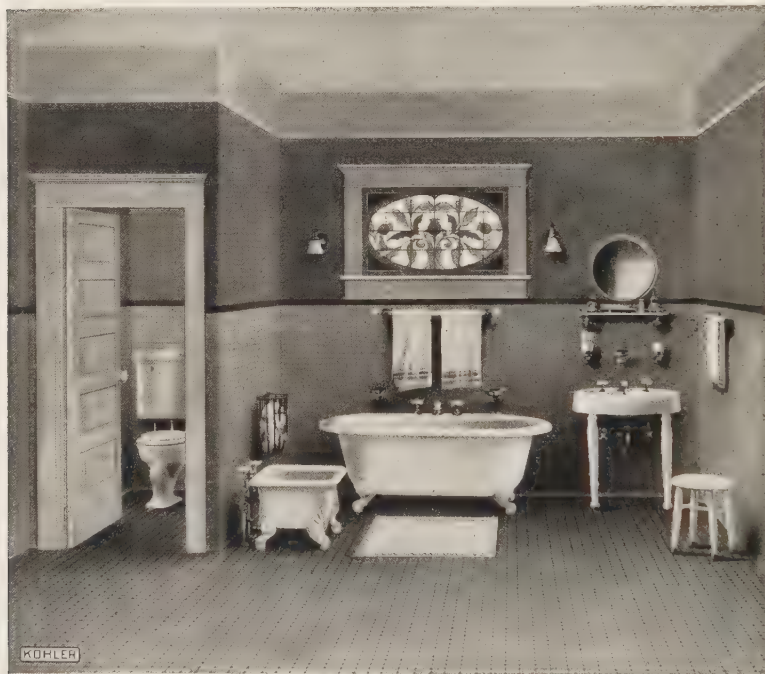
In planning your new home do not fail to give attention to a generous use of tile throughout the building. Tile is undestructible, and burnt to a much harder consistency than the average material, it is impervious to moisture and is not subject to the accumulation of vermin of any kind.

It is the only modern material from

which to build your fireplace, line your kitchen and bathroom and floor your porch. It is a material worth studying and making liberal use of.



ONE of the most essential things to consider in the construction or the remodeling of the home, is the sanitary equipment, not only for the bathroom but for the kitchen and laundry as well. While this equipment is in reality a necessity, the comfort and convenience derived from a well-planned bathroom, kitchen and laundry outfit is also a continual source of pleasure and satisfaction. Besides these advantages it adds materially to the investment value of the building and increases the rental rates, a point which the prospective builder should not overlook.



Bath Room Combination No. 6

Porcelain enameled sanitary ware possesses qualifications which makes it the logical ware to install, not only from a sanitary standpoint, but from an economical one as well, as it is made in a variety of patterns, styles, sizes, etc., to suit any and all requirements.

The line of porcelain enameled iron bath tubs includes what is known as tiled-in baths, larger rim oval tubs, either on base or ornamental legs,

and the regular staple patterns; also sitz baths, foot baths, receptors for showers, and child's baths in different styles. The tiled-in baths referred to are suitable for installation in a number of ways, either for tiling in rear wall only with porcelain enameled front and two end plates, for tiling in either right or left hand corner with enameled front and end plate, for tiling in a recess with enameled front plate only, or for tiling into the floor in center of room incased in porcelain enameled plates all



around. The porcelain enameled plates extend from underneath the rim of the tub to the floor, making a very attractive and sanitary outfit.

The lavatories are furnished in square, ellipse, half-circle and corner designs with or without aprons, supported on either porcelain enameled iron pedestals, leg standards, or concealed hangers. The latest patterns are made with an enameled soap dish depressed in slab permitting a drain into the overflow, which from a sanitary standpoint is a decided improvement over the old-fashioned brass soap cup on the back of the lavatory.

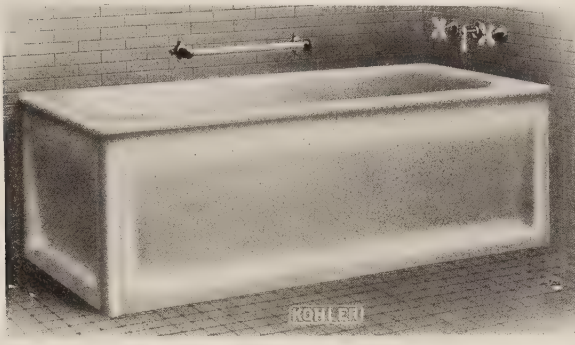


Plate A-3-A. "Universal" Right Hand Corner Tiled in Bath Tub

sanitary sink on the market as the entire fixture is cast integral, all joints and crevices prevalent in sinks with separate back and drainboard which afford lodging places for dirt and sediment, being eliminated. Kitchen sinks are also made with a roll rim without apron, and with and without drain board, and for installing in either right or left hand corner, if desired.

Laundry trays are made in several sizes and styles, the most sanitary equipment being the two-part roll rim laundry tray, both tubs and back over all being cast in one piece.

The practical features that go to make porcelain enameled ware the popular ware, are its sanitary qualities, durability and finish. It is easily kept clean, which is a very essential feature, and with ordinary care bestowed on it, it will last a life time and will always retain its brilliant white color and gloss.

It is to the interest of everyone to have only guaranteed ware and to see that each fixture bears the guarantee of the manufacturer, to prevent against substitution of inferior goods, the installation of which will mean an endless amount of expense, trouble and inconvenience, owing to continual replacements that will have to be made.

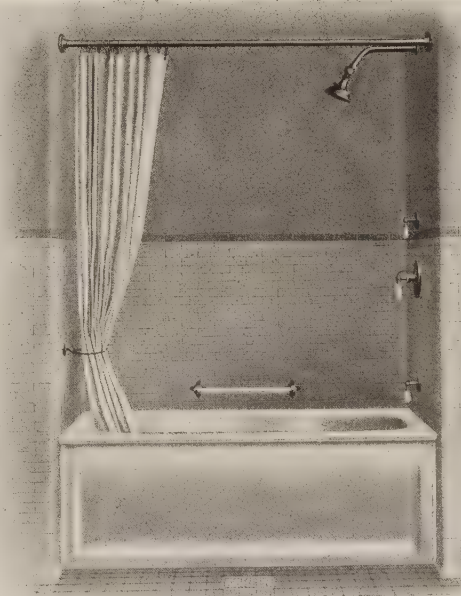


Plate A-5-L. "Universal" Recess Bath Tub With Shower and Mixer

Plate A-20-A  
"Marchioness"  
Bath Tub



Plate A-60-L  
"Royal" Bath Tub  
with shower and  
mixer

Plate A-38-A  
"Carlton"  
Bath Tub

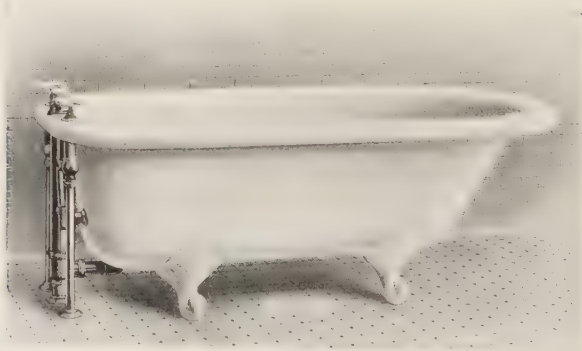






Plate A-157-A "Bellairs" Lavatory



Plate A-181-A "Colonial" Lavatory



Plate A-332 "Emmet" Lavatory

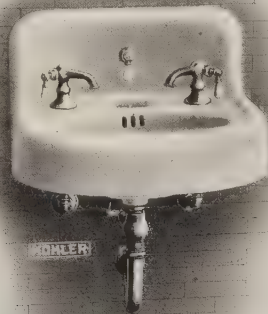


Plate A-580 "Bretton" Lavatory with  
lift waste through back

Plate A-1007 Sink



Plate A-1013 Sink

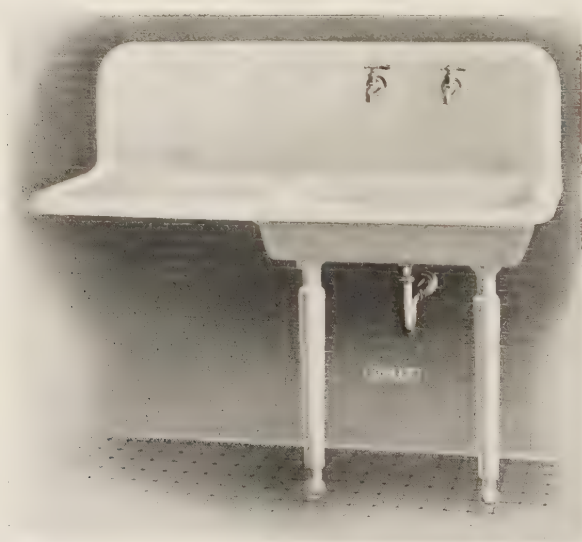


Plate A-1026 Sink



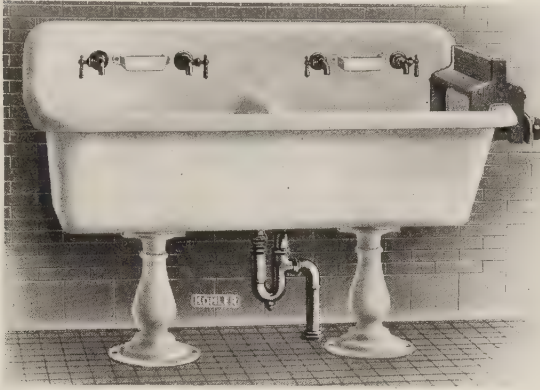


Plate A-1248  
One Piece Double  
Laundry Tub

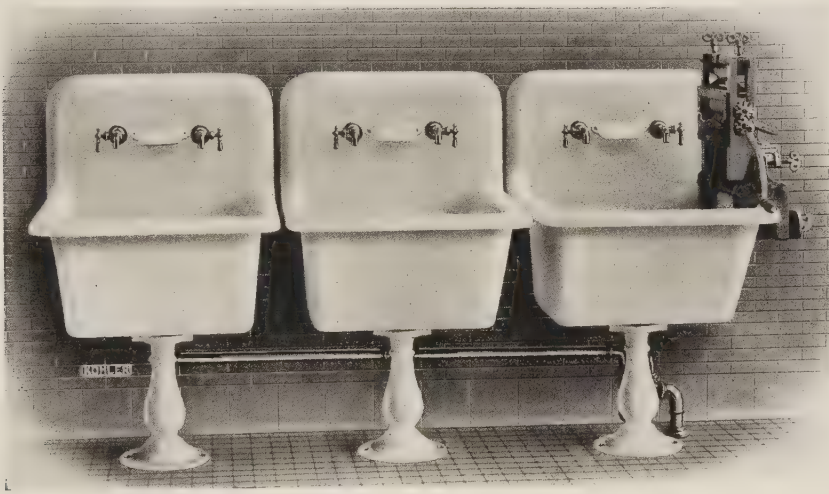


Plate A-1250 Battery of Three Laundry Tubs

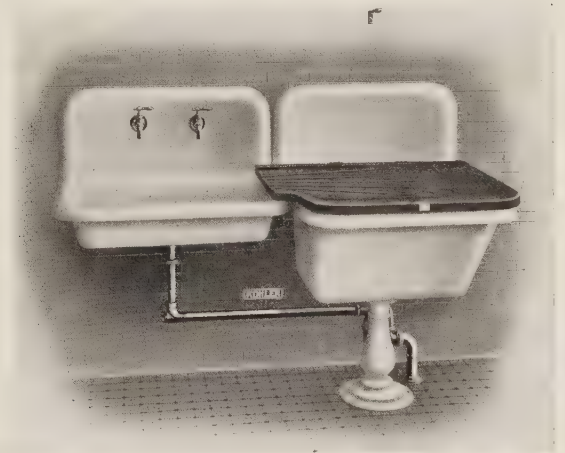
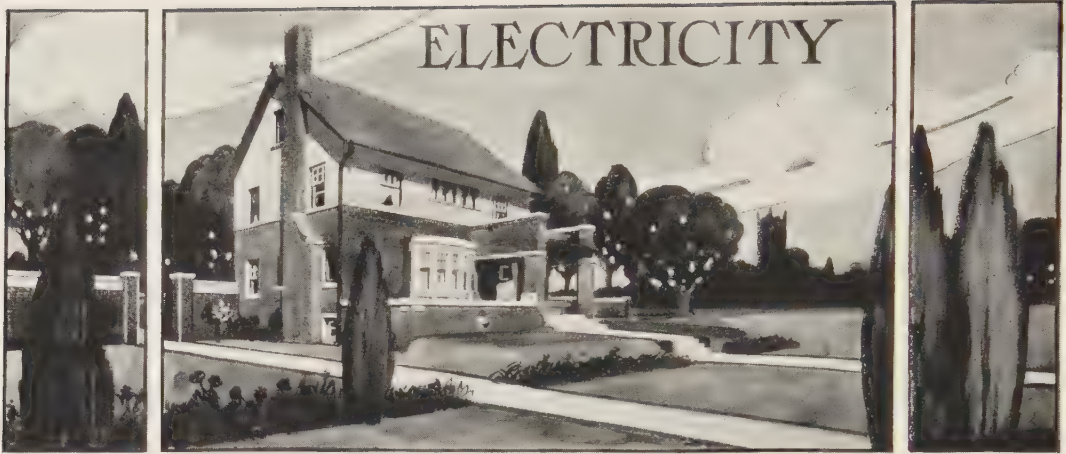


Plate A-1254  
Laundry Tub and  
Sink with combina-  
tion drain board  
and cover



## Electricity

**E**LECTRICITY has become one of the most valuable aids to modern house-keeping. Safety, convenience, cleanliness, efficiency and economy—these are its advantages and surely the list is sufficiently impressive to convince the most skeptical of prospective house builders that his new home should be wired.

Whether built for personal occupancy or for the purpose of renting or selling, it is equally important that a house be electrically equipped for there is no other feature which will contribute so much to its salability at so little expense.

Judging from the exceedingly narrow scope of the average wiring layout, there appears to be a general lack of appreciation of the possibilities of electricity so far as its domestic application is concerned.

The usual stereotyped wiring plan calls for key or keyless sockets for the electroliers and wall brackets, controlled by snap or push button switches. No provision is made for the use of electric portables such as heating devices, fan motors, sewing machine motors, etc., nor does such an installation lend itself readily to the decorative possibilities of auxiliary lighting as furnished by the many beautiful forms of lighting portables—table lamps, desk lamps, piano lamps, etc.

The purpose of this article is to describe and illustrate certain features and devices which will add materially to the utility of any domestic installation. It will be noted that all discussion as to the general methods of wiring have been omitted. These methods are arbitrary and may safely be left to any reliable electrical contractor.

It is better that all electric wiring should be installed during the construction period as the cost will then be considerably lower and the wiring system can be made more flexible and complete than if the work were done on the completed building.

Separate circuits for lighting and heating are strongly recommended as it may be found desirable to employ some of the heavier types of electric devices such as radiators, and ranges. If, however, the heating circuit is omitted, provision should be made for a generous number of outlets for the smaller devices which may be safely used on a lighting circuit.

We cannot place too much emphasis on this point. *Have a sufficient number of outlets.* The cost will be slight if these outlets are added to the original installation and the comfort and convenience of your electric service will be greatly increased.



The invention of the Edison Mazda lamp with its increased lighting efficiency and decreased cost of operation has made possible the utilization of current for supplementary heating and cooking without additional expense to the consumer.

Sufficient and proper illumination is of primary importance and as each room has its own particular requirements, a rather detailed discussion of this subject is necessary.

**ATTIC:** Sufficient general illumination is required to eliminate all dark corners. Pendent key sockets, controlled by a combined switch and buzzer placed at the foot of the attic stairs, are all the lighting outlets necessary.

The buzzer used in combination with the switch will prove to be a current saver as while the lamps are burning it furnishes a constant reminder that current is being consumed.

As the attic is seldom equipped with heating facilities, it would be well to install one or two surface type porcelain receptacles as outlets for a portable electric radiator.

**UPPER HALL:** Merely a general illumination provided by two or more wall brackets equipped with pull sockets is required. These wall lights should be controlled by a push button switch at the head of the stairs, this switch to be wired with a switch on the lower floor, so that the lights may be turned on and off from downstairs as well as from above. There is no actual necessity for other outlets.

**SLEEPING ROOMS:** The illumination of the sleeping rooms is quite a problem as it is sometimes impossible to decide where the various pieces of furniture are to be permanently located. In general, however, plans should be made for a central ceiling electrolier to furnish the general illumination and two wall brackets. The central electrolier should be controlled by a flush push button switch and the wall lights should be equipped with pull sockets. The wall brackets should be placed on either side of the dresser so that the mirror may be properly lighted. A light placed at the head of the bed will be appreciated as a reading light. This lamp should be controlled by a pendent switch.

It is of the greatest importance that each sleeping room be furnished with at least three auxiliary outlets as in case of sickness, the use of convenient electric devices such as heating pads, milk warmers, fan motors, etc., is essential.

**BATHROOMS:** As in the case of the sleeping rooms, wall brackets with pull sockets should be placed on either side of the mirror and a central electrolier controlled by a flush push button switch should be used to furnish the general illumination. At least two auxiliary outlets are recommended.

**LIVING ROOM:** A large ceiling electrolier controlled by a flush push button switch is necessary and in addition there should be at least two wall brackets with pull sockets.

Four auxiliary outlets are not too many for the living room as it will often be found desirable to utilize them for small lighting portables.

**DINING ROOM:** The most satisfactory illumination is a central cluster over the dining-table and if the size of the room requires them, wall brackets with pull sockets should be installed. The central cluster should be controlled by a flush push button switch and the individual lamps of the cluster should be installed in pull sockets so that if desired, the volume of light may be modified.

Two auxiliary outlets in the baseboard and two in the floor beneath the table will greatly facilitate the use of electric cooking devices such as percolators, chafing dishes, toasters, etc.

---

The accompanying illustrations show a number of wiring devices for use in domestic installations.



Key Socket



Pull Socket


Double Door  
Flush Wall  
Receptacle

Porcelain Separable  
Receptacle for Concealed  
Work

Miniature Swivel  
Attaching Plug

**KEY SOCKET:** The most common method of individual lamp control.

**KEYLESS SOCKET:** Used when lamps are controlled by a switch and individual lamp control is not required.

**PULL SOCKET:** The most convenient means of individual lamp control. Particularly useful in wall brackets and in light clusters. Pull sockets should be used wherever possible throughout the house as the pull chain puts the lamp within easy reach of any member of the family.

**QUICK MAKE-AND-BREAK SOCKET:** A key socket for use with heating devices up to 660 watts.

**FLUSH WALL RECEPTACLES:** In most cases where "auxiliary outlets" are mentioned in the foregoing article Flush Wall receptacles are meant. Two types are shown. The Removable Receptacle and Double Door Flush Receptacle. The Removable Receptacle is furnished in four parts: box, receptacle, plate and plug. The box is permanently installed in the wall or baseboard, the receptacle is inserted and the plate screwed in place. When the double door receptacle is installed in the wall or baseboard only the small porcelain flange of the plug is visible. Two perfectly fitting doors open when the plug to which the electric portable lead is attached is removed and are closed when the plug is inserted. The particular advantage of this type of receptacle is that the plug when in place is flush with the wall or floor. Plates for these devices are furnished in a number of different finishes so that they can be made to harmonize with any woodwork.



Keyless Socket


Removable Flush  
Wall Receptacle

Porcelain Moulding  
Separable Receptacle

Miniature Separable  
Attaching Plug

**PORCELAIN MOULDING AND CONCEALED TYPES OF SEPARABLE RECEPTACLES:** These receptacles are recommended for use in rooms where appearance is not such an important feature. These devices are considerably cheaper than the flush type, and are neat and inconspicuous.

**MINIATURE SWIVEL AND MINIATURE SEPARABLE ATTACHING PLUGS:** Both of these plugs are ideal for use with small electric portables. The miniature swivel plug may be screwed into the socket or receptacle without any twisting of the cord. The screw shell and ring swivels freely, allowing the plug body to which the lead is attached, to remain stationary. The miniature separable plug embodies another method of preventing the cord from twisting. After the body is screwed into the receptacle the separable cap is inserted.



The illuminating requirements of the reception room, library and lower hall are practically the same as those for the living room and may best be filled by the use of central electroliers, augmented by wall brackets and, in the case of the library, portable reading lamps.

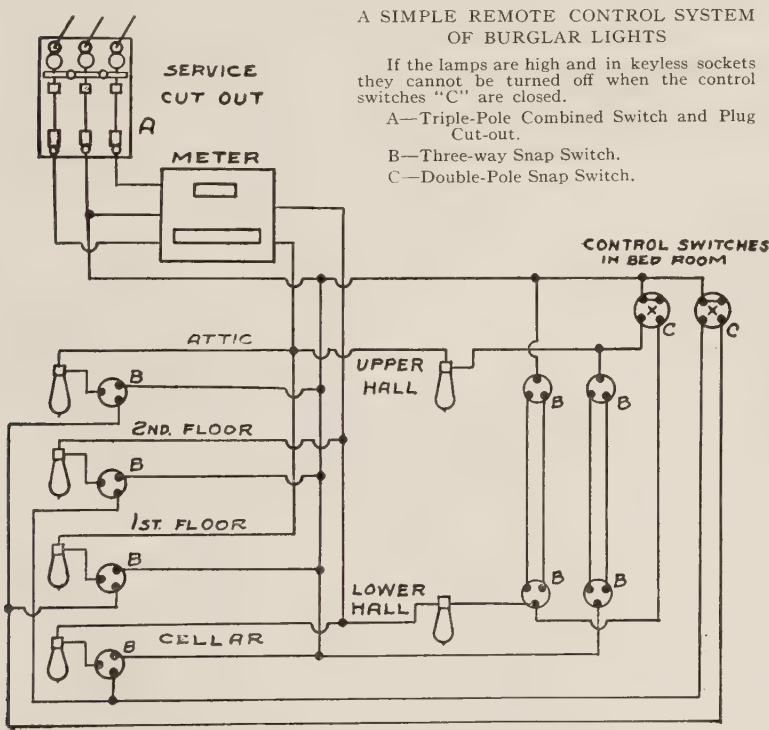
The hall light should be controlled by a flush push button switch installed at the side of the front door so that the light may be turned on immediately upon entering the house.

**KITCHEN:** There is no room in the house in which the illuminating requirements are more severe than in the kitchen. If this room is small, a Mogul Base receptacle installed on the ceiling and equipped with a high wattage Mazda lamp and Holophane reflector will be sufficient. If, however, the kitchen is large, there should be wall brackets placed over the sink and range. The wall brackets should be controlled by pull sockets and the center light by a push button switch. A sufficient number of auxiliary outlets should be provided to allow for the use of electric portables.

**CELLAR:** The cellar installation should be the same as that of the attic. A combined buzzer and switch installed at the head of the cellar stairs will prevent a waste of current.

All porches require a central ceiling globe controlled by a switch at the side of the door opening to the porch.

In case the house is to be equipped with a sleeping porch an auxiliary outlet should be provided to make possible the use of heating pad or fan.



In most rooms a soft harmonious light is to be desired rather than a glaring illumination.

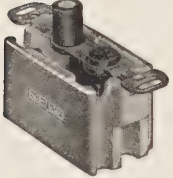
Flush switches and receptacles when installed in rooms having delicately tinted walls should be equipped with white enamel plates as this finish harmonizes with such decorative effects better than a metal finish.

All metal-covered wiring devices are furnished in a great variety of finishes and this fact should be taken into consideration when the installation is made.

At a small cost a burglar alarm system may be installed. A wiring diagram of this system is shown above. It will be noted that a master control switch in the sleeping room will turn on a light in every room in the house. This diagram will be understood by an electrical contractor.



Pendent Switch



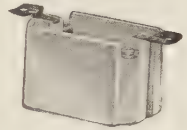
Standard Flush Push Button Switch



Combined Switch and Buzzer

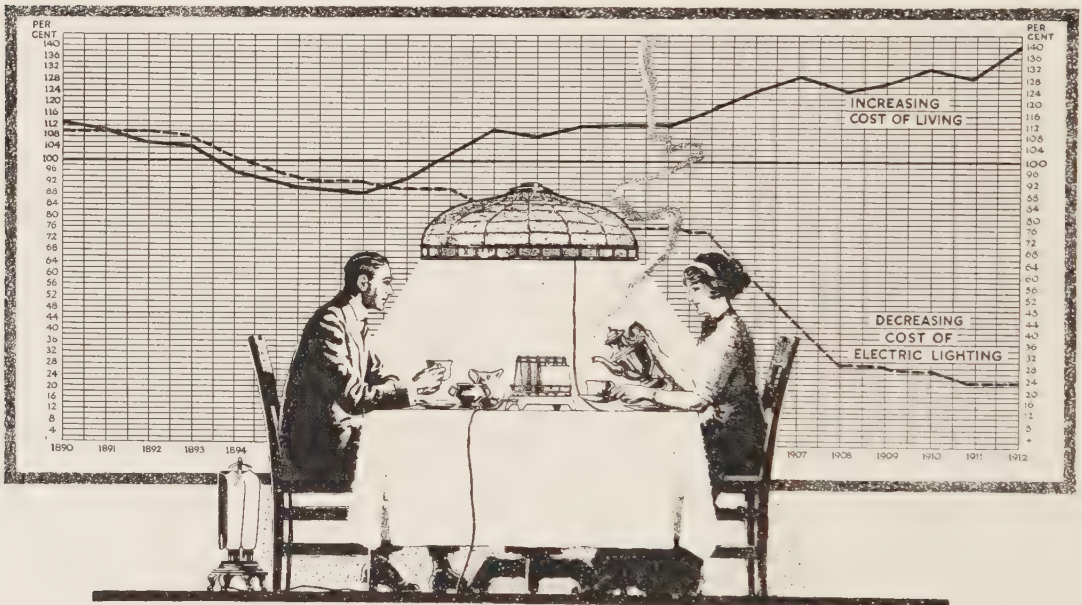
**PENDENT SWITCH:** This type of switch is recommended for use in places where wall switches controlling the lights are not desirable.

**FLUSH PUSH BUTTON SWITCHES:** Two types of this switch are shown, Standard and Removable Mechanism. The Removable Mechanism type is preferred as the box may be installed and wired during the construction period of the building and after all plastering is done, the mechanism, which is packed separately, may be inserted and the plate installed. This prevents all chance of the switch being ruined by plaster and dust entering the mechanism.



Removable Mechanism Flush Push Button Switch

**COMBINED SWITCH AND BUZZER:** This device consists of a single-pole snap switch and A. C. Buzzer mounted on the same base and permanently wired in series. While the cellar or attic light is burning the buzzer furnishes a gentle insistent reminder.



THIS CHART SCRATCHES ELECTRICITY FROM THE LUXURY LIST

It is based on Government figures

Twenty-five years ago electric light cost ten times as much as it does today. Seven years ago it cost three times as much as it does today.

All this has been effected by the progress and inventiveness of electrical manufacturers and by the enterprise and improved service of electric lighting companies.





## The Difference Between Good and Common Sash Cord

CHAS. T. WOLFE

**T**HE biggest difference between a fine and a common sash cord is in the finish of the cords.

The finest sash cord is made on the very latest improved braiding machine that in itself almost guarantees a perfect finish—that is, a cord without blemish or uneven surface, thus allowing it to run easily over a well made pulley.

In addition to the use of improved machinery, the finest cord is inspected four times before leaving the plant, whereas common sash cord frequently leaves a factory without any inspection. This means that common sash cord often leaves the hands of the manufacturer with many imperfections.

Well finished and evenly made cord naturally runs over a pulley smoothly and without friction and thus allows a window to work easily, whereas a common cord with imperfections, which means a lumpy cord and an uneven surface, causes a window to jerk and otherwise work unevenly.

Nothing but the whitest and longest fibre cotton is used in the manufacture of the finest sash cord. This of course means that the cord is made as tough and durable as possible. Fine cord, furthermore, is braided very firmly but not so stiff that it will kink and wear like common cord. It has been proven by government tests and by tests of technical institutions that a sash cord made of long fibre cotton will outwear the best copper sash chain or any other metal device more than three times. The quality of the cotton joined to the superior machine work and close inspection insures a cord of perfect finish. Common sash cord on the other hand is frequently made of short fibre, waste material and, as pointed out in the above, is of uneven surface and uncertain length of life.

It has also been proven that a cord made of single-ply, hard laid yarn is a more durable cord than a sash cord made of a 3-ply, soft laid yarn, and for this reason good sash cord is made of single-ply, hard laid yarn.

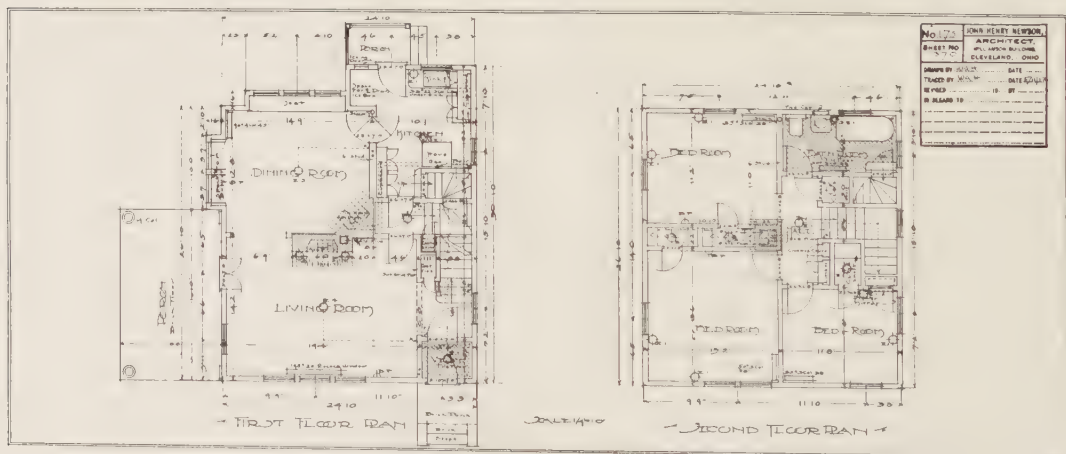
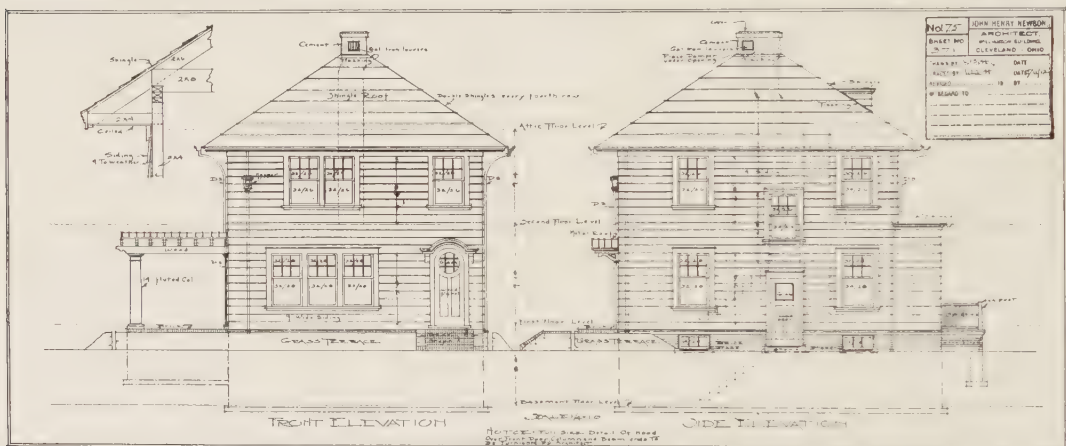
Under tests made by the U. S. A. Department of Commerce and Labor, it has been shown that a fine cord made as described in the above will outwear a common cord many times. This of course means a much less expensive cord in the long run.

The initial cost of putting a fine cord in the average dwelling house is not in excess of \$2.00 or \$3.00 per house over the cost of supplying the house with common cord, but the greatest advantage to the householder in using a fine cord is the fact that he is insured against having to replace the cord, and the replacing of one window where

common cord has been used will cost sometimes almost as much as completing the house in the first place with a fine cord. This is true because the sash has to be torn out, a carpenter has to be employed for the work, and the time and labor expended in replacing common cord in one window is almost as great as the initial cost of putting it in the entire house to start with. Therefore, the use of common cord is necessarily much more expensive than the use of a fine cord.

It takes about 24 ft. of cord to complete an average window, and in common cord this would cost about 16c. per window as against 22c. per window for a fine cord—or in other words, a difference of about 6c. per window. Copper sash chain costs about five times as much as the finest sash cord.

The average dwelling house takes No. 8 sash cord, which is  $\frac{1}{4}$ -inch diameter, although some architects prefer No. 7 cord which is only  $\frac{1}{32}$ -inch less in diameter than No. 8. Either one of these numbers is suitable for 15 to 25-lb. weights. The No. 8 cord, however, takes a 2-inch pulley and No. 7 a  $1\frac{3}{4}$ -inch pulley. No. 8 sash cord is by far the most commonly used size in the average dwelling house. Care should always be taken in selecting pulleys, for the reason that a pulley with a rough edge will file even the best cord or the best metal. The main point to be observed in choosing a pulley is to get a pulley that will run evenly and with smooth edges.



Sheets from Working Drawings of No. 175 (Greatly Reduced)





## Paint as a Medium For Interior Decoration

Color Suggestions by National Lead Co.

**B**Y WAY of foreword, we wish to say that if the furniture and hangings in any rooms shown in this article should give one reader the impression that the whole scheme is too elaborate for his simple house, or should impress another reader that the scheme is not elaborate enough and is unworthy his more sumptuous mansion, let each observe that color harmonies remain constant, whether the furnishing materials be expensive or modest. Four walls, a ceiling and a floor are elements common to every room and are the essential factors to be dealt with.

The color harmonies we show are, therefore, suitable for the simplest houses modestly furnished, as well as for elaborate homes rich in expensive hangings, oriental rugs and art furniture. Not only are the color harmonies suggested suitable for both high-priced and modest dwellings, but the merits of paint as the finish for walls and woodwork are fully set forth for all classes of houses. There are certain rooms where, if they can be afforded, expensive woods in natural finish are often very desirable for the trimming, but in all ordinary cases the varied and harmonious tints as well as the beautiful and sanitary finish obtainable with paint are most desirable. Also for the decoration of walls and ceilings there is much to be said for the fine gradations of tints obtainable with paint, and from a sanitary point of view that material's impervious finish is highly to be commended.

Color plays an important part in our comfort, happiness and health. No room is successful unless harmony of color has been taken into consideration. Many otherwise beautiful houses fail because conflicting colors have been selected or because the rooms have not been treated in relation to each other. No room can be treated independently without a loss to the general harmony of the house.

Color has the power to alter the apparent proportions of a room. Red contracts; blue and yellow expand. Green, unless very dark, has little effect upon the room, keeping the walls, as decorators say, well in place. Tan, gray, blue and pink have the effect of adding space, while brown, unless very light, has the same quality as green.

To the majority of people, green is restful, red stimulating and blue depressing; but under certain conditions, these colors may have quite a different effect. Blue when combined with green or certain tones of yellow is anything but depressing, while red, if placed in a dark room, will so absorb the light as to make a room positively gloomy. Green holds its own, but is warm or cold according to the proportion of blue or yellow of which it is composed.

Pure yellow is the most sunshiny color in existence and is far more satisfactory in a north room than red.

After the color for a room has been decided comes the question of treatment. The beauty of a plain wall needs no emphasis. In rooms where there are pictures and bric-a-brac a figured wall is often very confusing. It is, therefore, with relief that we turn to the restful, quiet effect of plain walls.



PLATE I. HALL

The value of a painted wall from a sanitary standpoint is well known, but comparatively few have realized, until recently, the possibilities of the painted wall from the viewpoint of beauty. Our illustrations, representative of different types of rooms, show wall effects obtained by the use of solid tints in combinations and of pure white lead and pure linseed oil tinted to suit various requirements and tastes.

While it must not be thought that the color harmonies suggested in these pages are entirely unsuitable for figured effects in the wall decorations, it will be seen that a variety of charming schemes can be obtained by the use of plain colors and that for certain rooms they are possibly more desirable in a home than figured effects. Plain colors certainly contribute a restful atmosphere very pleasing in these days of restless activity. Quiet surroundings tend toward the simple life.

### THE COLORED PLATES

Twenty suggestions for the proper blending of color in the decoration of various types of rooms are given in the following pages.





PLATE II. LIVING-ROOM

### PLATE I — HALL

SUGGESTION NO. 1 as in illustration: walls, yellow; ceiling, old ivory; trim, white; mahogany doors.

SUGGESTION NO. 2: walls, forest green; ceilings, yellow; trim, white; mahogany doors.

In this hall the architecture is decidedly Colonial and the color scheme of our first suggestion is on strictly Colonial lines—yellow walls, mahogany doors, white paint and mahogany are an attractive combination. In a hall where the light is insufficient, it is necessary to choose a light-producing color and in this connection nothing is better than yellow, for it suggests sunlight. It also strikes a cheery note of welcome especially suitable for a hall. Tints are also good, but shades should be avoided in dark rooms.

The second suggestion for the hall combines yellow and green; yellow in the ceiling, green in the side wall. In a well-lighted hall green is very satisfactory, but here as elsewhere in a house the color schemes of the surrounding rooms must be taken into consideration. No room should be decorated and furnished independently of the others, else discord will result.

Oriental rugs with a soft blending of color are advised with either scheme.

### PLATE II — LIVING-ROOM

SUGGESTION NO. 1, as in illustration: walls, soft red; ceiling, ivory; trim, light Flemish; tiles, green; curtains, green; rug, red predominating.

SUGGESTION NO. 2: walls, light orange; ceiling, ivory; trim, deep green; curtains, old blue; rug, green with old blue and orange border.

Here we have in our first suggestion, a decided but not a strong red. It is chosen to blend with the fine oriental rug which has a good deal of the soft pinkish red used so effectively by rug



PLATE III. LIVING-ROOM

makers of the East. This red is particularly effective with Flemish woodwork or with all stains except very light ones. Green harmonizes with this red, and green will be found in the tiles and curtains.

A more radical treatment is seen in suggestion No. 2. Orange forms the walls, while blue and green are used in the harmony, the trim being green.

#### PLATE III — LIVING-ROOM

SUGGESTION NO. 1, as in illustration: walls, medium olive; ceiling, slate green; trim, olive brown; curtains, Gobelin blue; upholstery and rugs, green and blue with a dash of orange.

SUGGESTION NO. 2: walls, Gobelin blue, ceiling, old ivory; trim, medium olive; curtains, green; upholstery, rugs, etc., blue predominating with olive green and a little clear yellow.

In our first suggestion we have combined green and blue, two colors which properly blended give very good results. They are particularly effective in a room of the character illustrated which is not a formal book room, but used as a general living-room. The number of objects in this room makes a plain wall especially effective. If a figured paper should be used in place of the plain wall, most of the charm of the wall would vanish. A plain effect is necessary in a room where there are many pictures and much bric-a-brac.

With blue and green a third color used sparingly adds to the harmony. Orange is the complement of blue and thus makes a harmony of contrast with blue, while it forms an analogous harmony with green, inasmuch as both orange and green are composed in part of the same color, namely yellow.

In suggestion No. 2 the walls are blue, the trim is green and the rugs are mainly blue, with some green and a little clear yellow. This is a related harmony, not a complementary one, inasmuch as green is formed by mixing blue and yellow.





PLATE IV. BUNGALOW

## PLATE IV—BUNGALOW

SUGGESTION No. 1, as in illustration: walls and ceiling, forest green; trim, dark gray; rugs, gray, black and red.

SUGGESTION No. 2: walls, golden brown; ceiling, light chrome yellow; trim, deep golden brown; rugs, brown, black and yellow.

This living-room is in a bungalow and there is a good deal of woodwork. In one suggestion it is stained a greenish gray and in the other a brown. Navajo rugs are placed on the floor and the furniture is of that sturdy simplicity suitable in a room of this character. It will be noted that in suggestion No. 1 the general color scheme—red and forest green—is carried out with pleasing effect; in the fireplace, red brick being used adds cheerfulness and warmth to the general tone of the room. Little accessories, which add greatly to the attractiveness of such a room as this and at the same time are appropriate and harmonious, are branches of leaves or pine needles banked on the mantel, and lighting effects and andirons in copper or Pompeian green metal finish.

In suggestion No. 2, where it is desired to carry out a general scheme in brown, black and yellow, a fireplace of native stone or cobbles makes a very artistic setting for the logs, with iron andirons to give the required touch of black. In a room done in these tones, any small decorative accessories should take a brighter hue to offset the more sombre colors. This can be done in the upholstery, rugs, table covers and the use of leaves or flowers.

It will be seen that either of these suggested schemes would be entirely appropriate for either a summer or an all-the-year-round bungalow. No matter what the season, either interior would be inviting and suggestive of cheer, restfulness and hospitality from the moment one stepped across the threshold.





PLATE V. LIBRARY

## PLATE V — LIBRARY

SUGGESTION No. 1, as in illustration: walls, golden brown; ceiling, pale yellow; trim, forest green; curtains, yellow.

SUGGESTION No. 2: walls, medium olive; ceiling, pearl gray; trim, dark gray; curtains, green; upholstery, gray, green and a little pure orange.

The requirements of a library differ from those of a hall or, in fact, from any other room in the house. Quiet effects are best here, providing the restful atmosphere so essential in a book room. Brilliant color treatment is out of place in this room and should be reserved for rooms where the limitations are less defined.

In the bedroom, for instance, a great variety of color treatments may be used as indicated by the owner's taste; the dining-room, also, offers a wide range of color treatment; but the library is essentially the place where not dark, but quiet, tones should prevail, giving an atmosphere of restfulness and the suggestion of study, thought or a care-free recreation hour with one's favorite book; consequently, the prevailing tones of the room are rather limited in scope.

The suggestions given above are made with this idea in view.

This does not mean, however, that a monotonous effect is to be desired. In fact, it is to be carefully avoided. A gloomy reading-room is as disastrous to the enjoyment of a good book as an ugly dining-room to the enjoyment of a good meal. The library, of all rooms in the house, is the place where one wants one's favorite pictures, bits of rare ornament, and other intimate touches that mean so much to the attractiveness of a room like this. In fact, by a library, you can almost judge the general taste of the owner of the house, for it is here that it is most clearly expressed.





PLATE VI. DINING-ROOM

A fireplace is an almost necessary adjunct and this has been suggested in both the treatments for this room. A very appropriate touch may be added to the fireplace by the lettering in gold of a favorite and appropriate motto on the woodwork just over the mantel.

The monotony of the room may further be broken by pieces of statuary, either marbles, if one is so fortunate as to own them, or good plaster casts set in a corner where they will stand out well against the background of the wall or hangings. Settees built in or around the fireplace or windows, also break up the lines of the room and add to the suggestion of general comfort and, then, it is always pleasant to add a small reading table with a drop-light cozily placed near the fireplace and within easy reaching distance of the book-shelves. Rugs, curtains, upholstery provide the color notes, together with book bindings, pictures, etc., remembering that frames and bindings should match the general scheme.

#### PLATE VI — DINING-ROOM

SUGGESTION No. 1, as in illustration: walls, trim and doors, white; hangings and rug, Gobelin blue; fixtures, gold.

SUGGESTION No. 2: walls, trim, etc., light gray; hangings and rug, old rose; fixtures, silver.

This dining-room is Colonial with a strong Louis XVI feeling in the over-mantel and over-doors. Above all else, the dining-room should be attractive and cheerful, and yet dignified enough for formal occasions. The suggestions that have been made here for color effect have carried out this idea, although both rooms have been made to suggest Period treatment.

The dining-room of today has few pictures on the walls, the decoration of the room depending nowadays largely on fine color treatment, and such accessories as chandeliers, sconces, mantel decorations, and any ornaments on the walls that are harmonious and appropriate. Rugs and upholstery should be dark enough not to show soil, and yet of a tone to contrast with the furniture and walls. The rugs that have been suggested for the two treatments above will be found to carry out this idea.



PLATE VII. DINING-ROOM

The first suggestion is to use white walls, white trim, a rug in which Gobelin blue predominates, plain blue hangings at the windows and all hardware of brass. There is a good deal of white here, but the ruddy tones of the old mahogany furniture and the mahogany mantel, together with the rug and the curtains, prevent any feeling of coldness. Old portraits fit well into this background, which is too true to the period to permit of modern pictures.

In the second suggestion will be found a treatment used extensively with Louis XVI woodwork, and that is light gray. Instead of white paint, light gray is used and in the place of blue we find old rose predominating in the rugs and curtains, while all hardware is of silver finish.

#### PLATE VII — DINING-ROOM

SUGGESTION No. 1, as in illustration: walls, medium olive; ceiling, slate green; trim, Venetian red; curtains, green; rugs, green, red-brown and a little blue. Old blue China and some blue in upholstery.

SUGGESTION No. 2: walls, light chrome yellow; ceiling, ivory; trim, forest green; curtains, yellow green and old blue; rug, green and blue.

The first suggestion is a decidedly green scheme, but it is an olive green blending well with the red tones of the woodwork and harmonizing with the old china of the mantel and plate racks. Where it is preferred to have the reds a little more prominent, this end may be gained by having a red-brick fireplace, as suggested above, copper andirons, furniture of mahogany, or a stain that resembles that color, and a rug in which reds are combined with dull browns and blues in the general green background. In such a treatment, any ornament or additional decorative feature in other colors will not look out of place, but will be found to blend perfectly. There is also a good deal of old brass in this room which is effective with the yellow-green tone.





PLATE VIII. BEDROOM

A good deal of yellow is found in the second suggestion. The walls are chrome, the trim a rich green, while yellow, green and blue form the harmony. This makes an especially cheerful room and would be particularly desirable where one wished to use it as a breakfast or morning room. Here a charming contrasting touch may be added by having the furniture of an oak brown upholstered in a tapestry stuff that combines the greens and blues that are carried out in the rug, and suggested in the general color scheme of the room.

#### PLATE VIII — BEDROOM

SUGGESTION NO. 1, as in illustration: walls, light blue; ceiling, pale blue; trim, soft white; curtains, blue and white.

SUGGESTION NO. 2: walls, old ivory; ceiling, ivory; trim, pale apple green; rugs, green, ivory and old rose; curtains, green and old rose on old ivory background.

The bedroom suggests always the brightest, daintiest colors that can be produced. Cheerfulness, coziness with abundant suggestions of warmth and comfort for winter and of coolness in summer should be introduced into this most vital room in a household.

SUGGESTION NO. 1—the blue room—lends itself to a great variety of treatment. For summer, the rugs may be in Delft blue and white colors and the lounge and chairs covered with dainty slip-covers of the same old blue and white chintz. In the winter, rugs that combine dark red with blue may be substituted, and the upholstery of the furniture, when its covers are removed, should disclose a similar color scheme. The furniture in such a room should be either mahogany or white, or a combination of both, as in the above suggestion.



PLATE IX. BEDROOM

SUGGESTION No. 2 is particularly effective; nothing daintier could be imagined than the combination of ivory, apple green and old rose. Yet, cool as these tones are, the room can be delightfully suggestive of warmth by the liberal use of old rose in hangings and upholstery, and the use of mahogany for the furniture.

Our first suggestion calls for a blue and white scheme which is particularly effective in a bedroom, our second for a blending of ivory, apple green and old rose.

#### PLATE IX — BEDROOM

SUGGESTION No. 1, as in illustration: walls, pale pink, ceiling, white; trim, white; rug, moss green; curtains green and pink on an ivory ground.

SUGGESTION No. 2: walls, pale lavender; ceiling, white; trim, white; rug, moss green; curtains, lavender and green.

Bedrooms are most successful when they are simple, and both our suggestions are removed from elaborate effects. This one is Colonial in style and lends itself well to a variety of treatments. The plain, lighter-tinted walls make an attractive setting for pictures and tone well with either mahogany or birch furniture. A comfortable lounge upholstered in cretonne of a figured pattern, a brass fire-screen and bed spreads of either some white material or figured cretonne, will break up the plainness of the room and lend a touch of warmth and suggestion of comfort.

With the second suggestion, any decorative accessories, such as upholstery, bed coverings, etc., should be in delicate gray greens or a deep violet with green and gold combined. With plain walls figured curtains are usually attractive and we advise cretonne with both schemes to match the upholstery of lounge and chairs. A figured rug could be used instead of a plain one with equally satisfactory results.





PLATE X. KITCHEN

## PLATE X — KITCHEN

SUGGESTION NO. 1, as in illustration: walls, cream; ceiling, old ivory; trim, white; tiles, white; linoleum, blue and white; rugs, blue and white; china, blue and white.

SUGGESTION NO. 2: walls, white or cream; ceiling, white or cream; trim, old blue; tiles, white; linoleum, blue and white, etc.

In the kitchen we have suggested blue and white for both schemes, with a slight variation in the treatment. In the first scheme we have advised white woodwork, white tiles, blue and white linoleum, cream walls and a lighter ceiling. Dark woodwork forms the basis of the second scheme, with white tiles, walls and ceiling, and blue and white rugs and linoleum.

Blue and white are always satisfactory in a kitchen, forming a particularly clean and inviting scheme, also making a most effective background for kitchen utensils, which are now ornamental as well as useful.

The kitchen of yesterday was a place to which little attention was paid. No attempt was made at decorating and such a thing as any attempt at artistic effect was unheard of. But with the progress of sanitary ideas in housekeeping, the place where the food is prepared became of more and more importance. Housekeepers began to insist upon tinted instead of papered walls, porcelain sinks came into use, floors began to receive proper attention. Later, it was seen that the kitchen should be made as attractive, within its limitations, as any other room in the house.

The kitchen of today, then, presents a dainty, inviting appearance. Some of the more elaborate kitchens have walls that are faced part way with white glazed tile and painted above, but a very dainty and equally sanitary effect can be obtained by the use of paint as suggested

above. Dainty curtains of dotted Swiss muslin or cretonne at the windows complete a room that attracts the housekeeper who is doing her own work, and helps materially in the solution of the servant problem.

### HOW TO GET THE MOST OUT OF PAINT

Paint to be right must not be only pure unadulterated white lead and pure linseed oil, but should be mixed fresh only a short time before using. Moreover, and most important, the ingredients should be carefully apportioned according to the particular surface it is designed to cover.

Different surfaces require different treatment. Soft woods drink in paint easily; it has to be forced into hard woods. Some turpentine is needed, and less oil, in the latter case. Old wood requires different treatment from new unpainted wood, and brick needs different paint from either. Variations in temperature also call for variations in paint.

While woodwork and plaster walls should be painted throughout with white lead and linseed oil as described, iron work, such as heaters, pipes, registers, etc., should be painted first with red lead mixed with linseed oil, and then finished with white lead and oil tinted to suit the color scheme of the room.

For interior decoration, the beautiful soft white peculiar to white lead is especially valuable. Every woman appreciates it who has noticed the effect of glaring, bluish-white walls and ceilings on gowns and complexions, particularly at night under artificial light. And this characteristic softness of white lead is carried into the infinite tints and shades made with it; for most tints, especially the more delicate ones, require such a tiny bit of coloring matter that the texture and peculiarities of the white lead remain dominant.

One of the large white lead manufacturers now employs experts whose business it is to furnish ideas and suggestions for both exterior and interior work in wood, brick, plaster, concrete and metals. It is a good idea to open correspondence with them when you have reached this point. Their advertisement may be found in the back of this book.

### EXTERIOR DECORATION

This article is intended to answer two questions of great importance to every homemaker. First, how to preserve and beautify the houses we live in; second, how to make the most of building plots limited in area.

We Americans are fast learning that it is just as easy and just as inexpensive to have homes that are tastefully decorated and grounds that are well planned as it is to have them fantastic and unattractive. With all our hurry we are somehow finding time and means to care about what is artistic.

We are learning that good taste is a higher and a safer standard than a mere fad or style or fashion. Good taste outlasts any passing fancy and is never freakish. It rests on the laws of harmony, which do not change.

One other thing which we have found out is that the selection of the right color scheme for one's house adds dollars and cents to the value of the property as well as gives satisfaction and pleasure both to the owner and his neighbors.

The house-owner's first need is a clear idea of what goes toward the making of an artistic home, and the first principle in that idea is the rule of simplicity. A scheme of decoration that is simple and appropriate is likely to be pleasing and, therefore, successful.

These two rules of simplicity and fitness are of the highest importance when applied to the painting of the house and to planning the bits of landscape around it. The house must appear to fit into the place where it has to stand. The way it does fit depends a great deal upon the way it is painted and the way the grounds about it are laid out. There must be harmony in the color scheme itself, harmony in the plan of the grounds, harmony between the house and its neighbors.



The grounds and buildings of a suburban or country home, carefully planned, will be an unfailing source of pleasure to the owner and to his appreciative neighbors. Fortunately, a good example is more likely to be followed than a bad one, and the existence of one beautiful place, however modest, will stimulate the owners of adjoining properties, often transforming a whole neighborhood.

### THE COLOR PLAN AND THE PAINT

A house which is set closely among trees or other verdure should not be painted green or olive, though there may be no objection to green trimming. Colors contrasting with the surroundings are better for the body.

If a house is low, with a tendency to "squattiness," a dark color should not be used. Paint it light and preserve the benefit of what height it possesses.

Nothing is better than pure white for certain styles of country and suburban houses, especially if set snugly against a green background and amidst green surroundings. Naturally, however, white is a poor scheme for factory towns or other dirty localities. A very light gray, like French or pearl gray, may be more durable than pure white, and yet give nearly white effects.

Houses with shingled upper stories, as a rule, should be painted on the lower story a lighter shade than the shingles. The shingles may be Indian red, dark brown, dark green or some olive shade. The body should harmonize, as light or dark olive with Indian red, cream with browns, the grays with dark green or dull red.

Not all colors and tints are equally durable. Cold colors, like the grass greens, blues and certain cold shades of yellow, hasten the deterioration of the paint film. This is due to the fact that they do not reflect or turn back the heat rays of the sun, but allow them to penetrate the film.

Tints based on the reds, browns and blacks are, as a rule, the most durable. Thus the grays, the slates, the browns, the richer yellows, etc., are excellent for wear and are at the same time most pleasing on the house.

Perhaps a word should be added for the benefit of those who may have always thought of white lead as good for white paint only. The fact is, white is and must be used as the base in making all paints of light tint and many paints of dark shades, too. Black and certain intense shades of blue, red, brown and yellow can be produced without using any white base, but by far the greater number of tints, especially those most admired for house paint and the most durable for that purpose, are made by mixing a small portion of tinting color with a large portion of white lead. With some colors a few ounces are enough to tint 100 pounds of white lead.

### MORE IMPORTANT THAN COLOR

As important as the color scheme is, it is not the most important consideration in painting your house. Choose your color scheme carefully, but choose your paint still more carefully; otherwise your beautiful color scheme may vanish in a few months.

Aside from a few perishable tints which cannot be secured in any durable material, you practically have an unlimited range of tints and shades to choose from if you use pure white lead and pure linseed oil in all your paint.

Pure white lead and pure linseed oil make a combination which has been known for generations as the best paint for all general painting. It still stands unequalled, both for durability and for the wide range of its possibilities in decoration. From white down through the widest possible gradations of every imaginable tint and shade, pure white lead paint, made to order, meets every whim. The user of stock paints is naturally limited to stock tints.

All house paint, except the very dark colors, is made from white lead and linseed oil or from substitutes made to imitate one or both of these two standard ingredients. Three things, then, threaten the durability of your paint: first, the adulteration of the white lead; second, adulteration of the linseed oil; third, the use of a very perishable coloring material to tint the

white lead. To be sure of getting pure white lead, pure linseed oil and proper tinting material, the first step, obviously, is to buy the ingredients separately and have them mixed especially for you.

Sometimes imitation paint is represented as pure white lead and pure linseed oil. That is fraud.

Sometimes you are told that there is something else in the paint, but that it is put there because it has been discovered that white lead makes better paint if some other white substance is added to it. In the face of pure white lead's long years of undisputed success, the burden of proof is on the person who proposes to tamper with it. Don't let experiments be made on your house at your expense.

### HOW TO PROTECT YOURSELF

What the property owner wants is a painting job which will last and look well a reasonable length of time. Experience has shown that paint made of pure white lead and pure linseed oil, wears, is reliable, gives the property-owner his money's worth. Specify those materials and see that your painter uses them. Learn the name of a good brand of linseed oil and white lead and specify it.

Have the white lead and the other ingredients brought to your premises and mixed there. This is not only surety that you get the materials you specify, but it insures the paint's being mixed fresh and for your job. First thin the white-lead paste by mixing with oil. Tinting colors should next be added, then more of the oil. Finally, the turpentine, if that material is to be used, should be stirred in, and for outside work not more than one part turpentine should be used to five parts oil.

A slight saving at the expense of durability will be costly in the end.

Use good materials mixed right and put on in coats of proper thickness. A job will result which will put off the day of repainting several years. That is true economy in painting.

Finally, employ a good painter. This point is given last, but is of prime importance. It is not economy to set unskilled labor at a job of painting just because anyone can spread the paint on in some sort of fashion. The painter's experience in diagnosing the needs of the wood, and his knowledge of just the right proportions of lead, oil and drier to fit the case, make him absolutely necessary to a good, economical job of painting. Like good materials, a good painter pays for himself.



A development of No. 114 as built in New Jersey with sleeping porch added over front porch.  
For floor plans see page 230.





## The Weather Stripping of Modern Homes

By HAROLD McGEORGE, Consulting Engr.

UNFORTUNATELY for weather stripping, this is one of the last things considered in the construction of homes and yet at the same time it is one of the most important for several reasons. It is one of the few things that enter into the construction of a modern home that directly effect the operating economy and efficiency of the home.

Take for instance the matter of fuel saving. This, of course, is always an item of interest to the man that pays the bills, as fuel costs are never light and anything that will tend to decrease them should be welcome. Now the use of metal weather stripping in the modern home means that this expense, taken as a general proposition, is reduced about 25 per cent. per year. Oft times this statement is doubted but actual records have proved that this amount of saving can be effected and when conditions are studied it is easy to see the reason why.

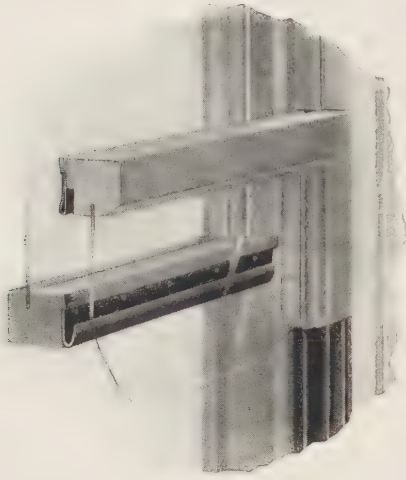
If you have studied your own house conditions you have noticed that the greatest amount of fuel has been consumed, not on the cold days but on the windy days and when windows are fitted in a more or less loose condition—as they must be if windows are to open—they will let through more or less cold air, thus giving a greater volume of air to heat in the house and by the same wind action the heat is lost or pumped out of the house under these same loose conditions. If all windows are equipped with first-class metal weather strip of approved type, they are now made practically tight, wind is excluded and the interior house condition becomes uniform. This is particularly noticeable if you are heating by hot air. You no doubt have noticed that the temperature of the various rooms vary materially with the direction of the wind. A room that is cold to-day is very apt to be a warm room tomorrow and what is more to the point, it often happens that the different members of the family have a preferable window or corner that cannot be occupied on certain days. That is a condition that is absolutely eliminated by the use of weather strips and this favorite cosy corner will always be habitable.

Another saving that is effected by the use of a first-class approved type of weather strip is that the dust leakage through the windows is absolutely eliminated and at the same time soot and fine dust of all kinds is kept out of the house. The housewife will at once appreciate this for it means that her cleaning labor is reduced and that her curtains and draperies will stay cleaner a longer period than otherwise.

Oftentimes in talking to owners concerning the use of weather strip, particularly when the weather stripping of the entire house is in question, the owner or the housewife

will say that it is not any use to weatherstrip the second floor "as we always sleep with the windows open." This may be true but the use of weather stripping on these windows means that the temperature of the various rooms when the windows are closed

can be raised much more rapidly than otherwise, and by the same sign this means warmer rooms for retiring in or dressing in.

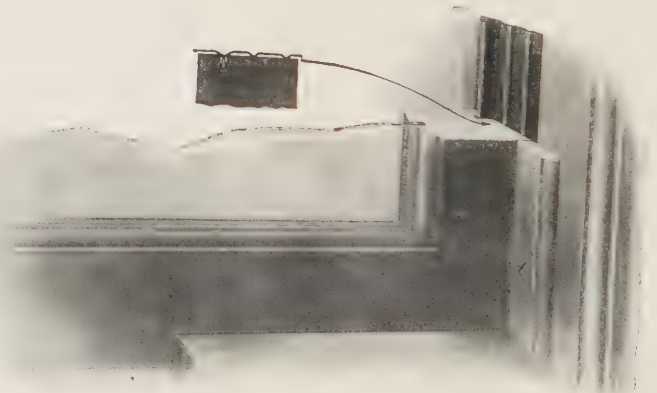


Chamberlin Meeting Rail

It has been our experience that where comparisons have been made between rooms that were stripped and those not stripped, that the temperature of the weather stripped rooms could be raised in one-half the time and held for practically twice the time that it could under the reverse condition, viz., unstripped room.

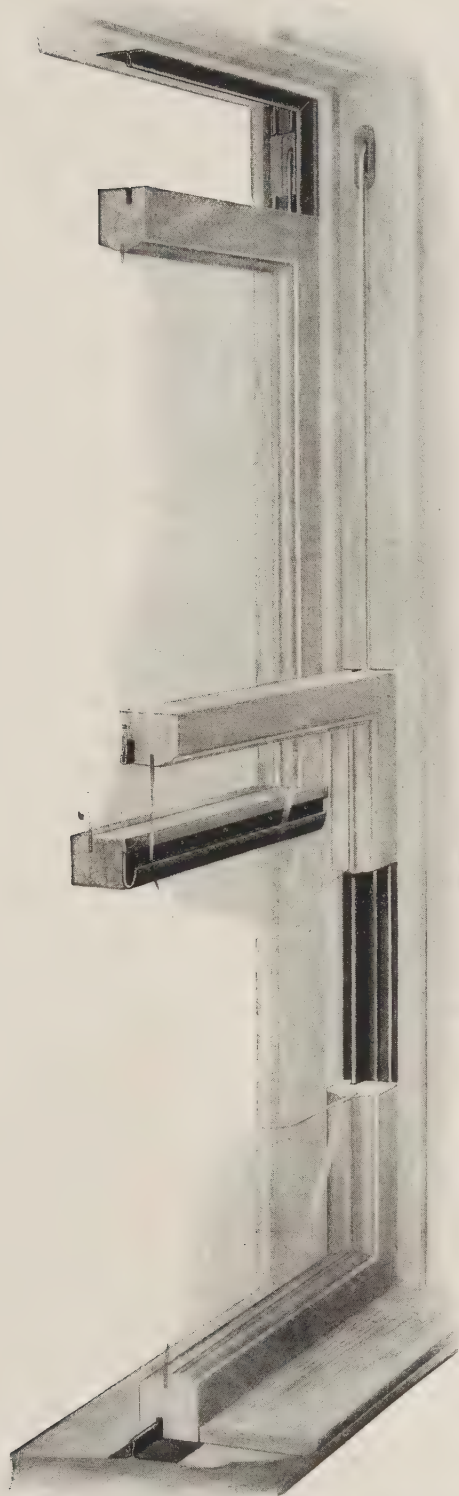
Another factor that should be considered when the use of metal weather strip is contemplated is that it will stop windows from rattling, and as there is hardly a more undesirable condition than that of having windows rattling in the night, this is an item that can be appreciated.

When the use of metal weather strip is being seriously considered, there is another question that oft times arises and that is the advisability of stripping only the so-called "cold sides" of the house or all four sides. At first sight it would seem that by the stripping of the so-called "cold sides" the main object of weather stripping can be accomplished insofar as it refers only to the heating of the house. This is an error, for, when you understand the wind conditions to which the house is subjected to, you can see the reason why. Moving winds in meeting an object in the shape of a house, divide and at some distance beyond the house they will reunite. Now between the point of reuniting and the face of the house there has been an area of low pressure established—call it suction or vacuum as you please—which tends to pump through every crevice on that side of the house the air from the house and of course with the air goes the heat. So that if we were to follow this argument out logically we would not strip the cold side of the house but the leeward or warm side of the house, on the principle of plugging up the holes through which the air is lost. Now you can see that when the wind diverts to a different quarter you now have three sides of your house subject to wind movement so therefore the only logical thing to do is to weather



Chamberlin Corrugated Metal. Note the window, instead of rubbing against the full width of the runway, slides on the corrugated bearing parts, making an extremely easily operated window, and at the same time a perfectly weather stripped window.





strip all four sides, thus making your house immune to wind direction and speed, making all interior heating conditions uniform and securing the maximum result from your heating plant at a minimum cost.

Now after all these points have been seriously considered, the construction of a strip is the thing of prime importance. We have shown in this article several illustrations which show one of the first-class strips on the market and these illustrations will explain themselves.

Another item in the selection of a strip is to buy that sold by a first-class, reputable company, one that has been in business long enough to be responsible and to back up any guarantees made, and one that will give you practically perpetual guarantees so that should at any time any faults develop in your strip, you can find the responsible party and be sure that they will correct all faults.

Copyrighted 1910  
Chamberlin Metal Weather Strip Co.

Chamberlin'd Window—equipped and thoroughly protected by Chamberlin Metal Weather Strip.

# The Estimated Cost

THIS is probably a matter which causes more misunderstanding between Architect and Client than anything else. We will pass over the Architect who willfully misrepresents the cost of a house to obtain a commission, without comment. His name is Legion and the trick is so old that no one should be misled by it. But so many elements enter into the cost of building, that an architect, no matter how competent and familiar with building conditions he may be, will, sometimes, estimate wide of the mark.

If one will stop to consider that frequently there is a variation of 100 per cent. in the bids received on one job, one can readily see how impossible it is to make estimates of cost which will always hold good.

The cost of a house depends not only on the kind and quality of material and labor used, though these are to a great extent the determining factors, but also as to whether work is plentiful or scarce. In slack times contractors will bid close so as to secure work, even at cost, and thereby hold their organization together. When work is plentiful they naturally will add a greater percentage of profit, because they are indifferent to whether they secure the work or not.

Another factor follows largely on the above, though under some conditions it enters into the proposition from entirely different causes. In times of great building activity, labor is in demand and carpenters, masons, bricklayers and other artisans can secure higher wages than when work is scarce. In the large cities labor is usually well organized and high wages are demanded and secured, whether there is a good demand for labor or not. The material men are also well organized and the prices of material are frequently regulated by agreement rather than by the natural law of supply and demand.

Another factor which enters into building cost is one entirely beyond the Architect's knowledge, though it has fully as much bearing on the cost as the others. This factor is the client himself. If his credit is good and he has a reputation of fair dealing, contractors will bid low to secure his work for they know that they will get a square deal and will get their money when due. On the other hand if the client's credit is poor or if he has a reputation for being unreasonable, contractors will either refuse to bid on the work or will add an additional percentage of profit to cover possible contingencies.

The business ability of a client also enters largely into the proposition, as it does in any other matter. A good business man can build cheaper than one who has no business ability.

Current prices of material and labor can be easily determined in any locality, therefore, the *estimate* of cost is merely a mathematical problem, but the *actual* cost will be determined by all of the above factors as well as several minor ones, and can only be determined by securing bids for the work.

We hope that we have made it clear why there is sometimes considerable difference between the *estimated* cost and the *actual* cost.

An experience of over twenty years has enabled us to formulate certain rules which enable us to estimate cost closely under *normal* conditions. Thus, using an average grade of material and labor, a frame house should be built, outside of the large cities for about 15 cents per cubic foot, taking the actual cube of the house from footings to



average height of roof. A hollow tile house, covered with stucco should be built for about  $17\frac{1}{2}$  cents per cubic foot, and a brick house should be built for about 20 cents per cubic foot.

The inexpensive type of construction used in the South and West can be built for from 10 to  $12\frac{1}{2}$  cents per cubic foot. If special features are incorporated in the house, such as built-in buffets, wainscots, beam ceilings or other special work, their cost should be added to the estimate as computed on the above basis.

Where the actual cost of a house is known to us that cost is given in this book, as the cost of that particular design. Where the actual cost is not known to us the basis of 15 cents for frame,  $17\frac{1}{2}$  cents for hollow tile and 20 cents for brick has been used in computing estimated cost, with the exception of bungalows, which are computed on a basis of from 10 to  $12\frac{1}{2}$  cents. These estimated costs should hold good under *average* building conditions. In many of the smaller towns and cities the designs should be built for less than the estimated cost and in the South and West for considerably less. In the larger cities and in the extreme Eastern States the actual cost will probably exceed the cost given.

This estimated cost is for the house complete, except decorations, lighting fixtures, walks, grading yard and landscape work.

A blank for furnishing information concerning local costs of material and labor follows the advertising section of this book. On receipt of this blank properly filled out we will gladly furnish an estimate of the cost of any design shown. This will enable you to determine whether the design you want should be built within your appropriation, before you order plans and specifications.

In conclusion: The cost of building is constantly increasing, the increase for the past three years being about 10 per cent. per year. On account of the decreasing supply of timber, lumber will continue to increase in price, and the high cost of living will raise the cost of labor. Brick and tile, plumbing and heating supplies, plaster, paint, and all building materials will continue to advance in cost. Therefore, if you have decided to build, do not delay, in hopes that you can build cheaper next year. Build at once and let this increase add value to your home.

JOHN HENRY NEWSON, (Inc.)  
WILLIAMSON BUILDING  
CLEVELAND, OHIO



## Special Designs

**O**N ACCOUNT of the many inquiries and orders for special designs received through the first edition of "Homes of Character," we have established a special department for this class of work. The many letters received from satisfied clients all over the world is evidence that we can make satisfactory plans, to meet individual requirements, by correspondence and without personal interviews with clients. Though on large work, or if client prefers, we send our representatives to any part of the United States. This is seldom necessary, however.

Following the advertising section are blanks for Special Designs and Sketches. If no plan in this book meets your individual requirements, nor can be modified to meet your requirements, or if you have some special plan in mind, on receipt of the Special Design blank filled out with as much information as you can conveniently furnish, with a sketch of this plan, we will make a quarter scale drawing from your sketch of the first and second floor, a perspective of the exterior, similar to the exteriors shown in this book, and such other drawings as may be necessary to explain the plan. We will also estimate the cost of the house from the information given, make suggestions that in our opinion will improve the plan and forward the plans, sketches and estimate for your inspection, and such changes or suggestions as you may desire to have us make. If the changes are few and our development of your sketch meets your approval we can then prepare the finished drawings from the corrected sketches. If there are many changes we will redraw the sketches and forward to you for further corrections.

After the preliminary plans are developed to your satisfaction, the final drawings and specifications are made. In this way you can get a home built exactly according to your ideas, and developed, with our assistance, along true architectural lines.

While the cost of special design plans, is of necessity, higher, the result will be a true expression of your ideal of a home—a "Home of Character" in the truest sense. To cover a part of the cost of preparing these preliminary sketches, we require a deposit of \$5.00 with the order, which will apply on the total cost of the finished plans.

Our charge for complete plans and specifications on special designs is 3 per cent. of the total cost of the house.

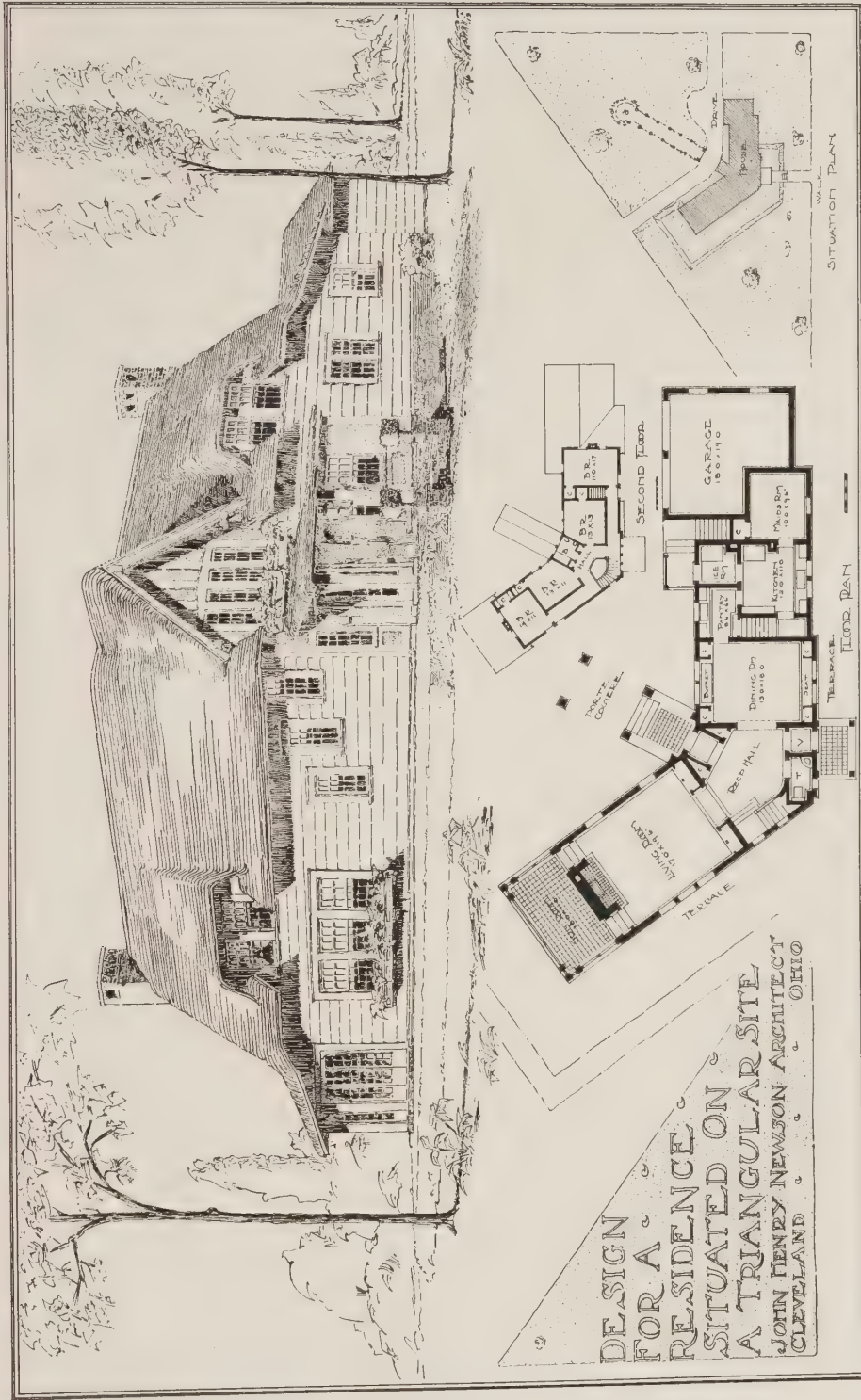
These plans and specifications are complete in every way. We employ the best designers and draughtsmen that we can secure on this work.

Our Special Designs are second to none, and, if desired, our organization can take complete charge of the work, including interior decorations and furnishings, and landscape work.

Charges for superintending erection will depend on the size and character of the work and distance from our nearest office. We invite correspondence and will be pleased to answer inquiries, or quote prices.

JOHN HENRY NEWSON (INC.)  
Williamson Building  
Cleveland, Ohio





Frontpiece is sketch of interior of this design.

## Reviews and Criticisms 1910 Edition of "Homes of Character"

Mr. John Henry Newson is famous throughout this country as the designer of "HOMES OF CHARACTER" and is recognized as one of the foremost architects of the country.—*The Davenport Democrat*.

"HOMES OF CHARACTER" is a book to dream over. Not that it isn't practical, though. Its contents include bungalows, cottages, and regular houses. These are neatly printed with adequate descriptive matter between artistic covers.—*Cleveland News*.

"HOMES OF CHARACTER", by John Henry Newson, explains its character and asserts its quality in the title. It is a book of plans of houses of moderate price which have full harmony between exterior and interior, which are artistic to look upon and "homey" to live in. These plans express Mr. Newson's individuality as an Architect; his practicality, as well, for he gives just as much attention to the convenience and comfort of the kitchen as to the beauty of the drawing room.—*Cleveland Leader*.

I have examined the book with a great deal of interest—in our opinion it contains many interesting designs of houses, meritorious both in plan and design.—*John E. Parker, Manager Architectural Department, Ladies Home Journal*.

The character of your book is excellent; it is well printed and there are many good designs in it.—*M. L. Keith, Publisher, Keith's Magazine*.

Here is a helpful volume for the home-builder. Any person desiring to build a home, not merely a shelter, but a home combining comfort, convenience and character, will find the book of decided value.—*Lincoln Star*.

The best book of house plans.—*Alabama Baptist*.

I was delighted with the book of artistic homes. We have been in need of something along this line for a long time.—*Donahey*.

I have never seen a book of houses—"Homes"—I should say—that has appealed to me as have these of yours.—*Washington, D. C.*

I ordered several books from other parties but yours is the only one that interests me particularly. Permit me to compliment you on the GENERAL GET-UP and SENSIBLE PLANS therein shown.—*Buffalo, N. Y.*

I want to say that I have spent \$16.00 on books of plans, and your book is by far the best of all, also your letter answering all my fool questions is a guarantee that you are an ARCHITECT and MAN.—*Hico, Texas*.

The book is one to be proud of and will certainly appeal to artistic people looking for something worth while.—*Cress Kill, N. J.*

We received some days ago your first sketch of our house plans; and on looking them over we feel that we must compliment you upon your ability to comprehend. You have grasped our ideas in a way far exceeding our expectations.—*San Angelo, Texas*.

The house is finished and we are in it and enjoying it thoroughly. Everybody says it is a model of convenience and beauty, inside and out. The house is all right in every particular.—*Houston, Texas*.

Blue Prints received Saturday and we are delighted with your solution of our problems.—*Canton, Ohio*.

I enclose herewith a photo of the little house after your plans "as built in New Jersey." The house has received much favorable comment. It has "sold" faster than any of the other houses on the home tract.—*Newark, N. J.*



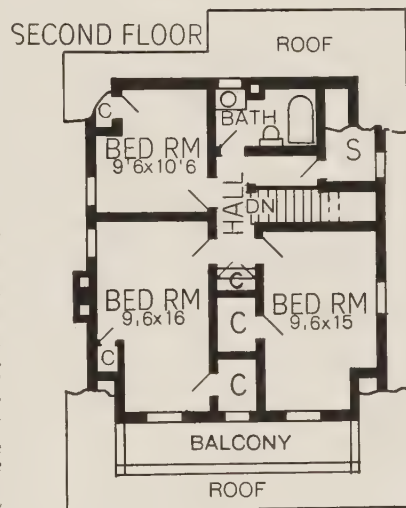
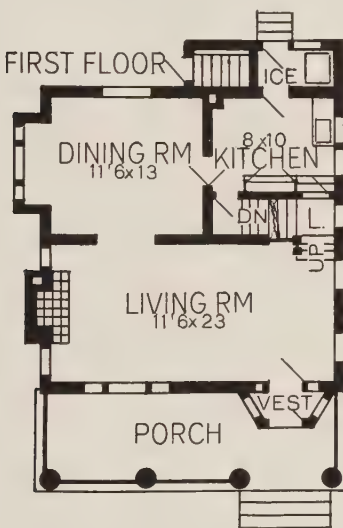


### A CHARACTER HOME

In this house all of the details shown in our drawings have been carefully worked out and the result is truly a "Character Home." The exterior is very simple and has been enhanced by the use of large turned columns on the front porch. Ten-inch resawn siding is used on the exterior, and the roof is of shingles with the barge curved to represent

a thatched roof. The color scheme has been carried out in warm cream for the body, trimmed in white, while the roof is in a greyish cast, and the whole house presents a very artistic exterior.

The floor plan while simple is neatly arranged and contains more room than could be imagined from the size of the foundation. The living room across the front has a vestibule projecting on the porch. The dining room opening off of the living room has a bay with high windows,



providing a suitable space for a buffet. The kitchen, while small, contains everything to make it complete. The stairs lead to the second floor from both the living room and kitchen. The three bedrooms are arranged with due regard for beds and other bedroom furniture, and the bathroom is convenient to the bedrooms. There is no attic, but a convenient storage space is provided and the small balcony on the front is convenient for airing bed clothes and for general porch purposes.

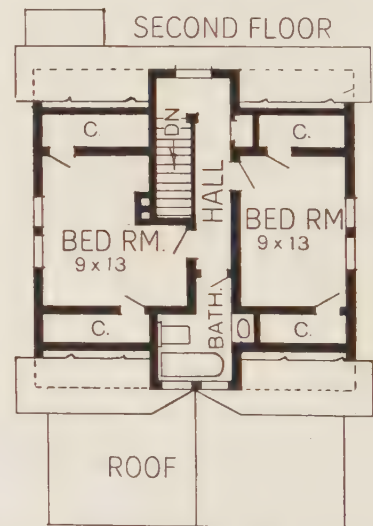
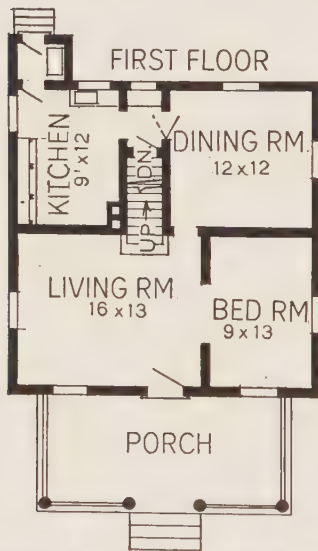
As built this house cost \$2,000.00, which is probably the minimum, but under expensive building conditions should not cost to exceed \$2,500.00.

No. 149-A—Size 24 x 24 feet. Price of Plans \$20.00. Price of Specifications \$5.00.



A SMALL BUNGALOW

In this plan provision is made for a bedroom upon the first floor and the dining room has the virtue of being separated from the kitchen by a small pantry, a feature always striven for in the larger houses. The stairs go up directly from the living room to a hall, at the end of which is placed the bathroom and a bedroom on each side. This



plan is well suited to a small family or would make a very desirable type of summer cottage. A door could be placed between the kitchen and living room and the living room used as a combined living room and dining room, which would permit using the dining room as a bedroom.

As shown in the photograph this house cost \$1,600.00, with basement under entire house, good plumbing and a hot air heating plant. In localities where the cost of material and labor are high it might cost \$1,800.00 with complete equipment. It could be built as a summer cottage for about \$800.00.

No. 214—Size 26 x 26 feet. Price of Plans \$10.00. Price of Specifications \$5.00.





### A SIMPLE CHARACTER HOME

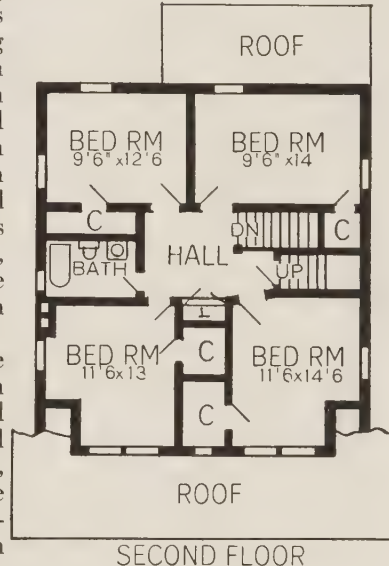
This design is built in wide siding without horizontal band or belt courses. This effect, together with the long roof sloping over the front porch, is one that contributes largely to the simple dignity of the exterior.

The floor plans call for a basement under the entire house and the living room on



the first floor extending across the front, as well as the porch. The dining room is at the rear with a pantry connecting with a kitchen. The second floor is reached both from the kitchen and living room and a small compact hall on the second floor gives access to four bedrooms, as also a stairway to the attic, which is finished in one large room.

Hardwood floors are used throughout, with hardwood trim, stained and waxed on first floor, and birch or poplar enameled, with birch doors, on the second floor. Attic and kitchen are finished in yellow pine.



A square house of this type is inexpensive to build, considering the amount of floor space, which is further increased by extending the bedrooms over the porch.

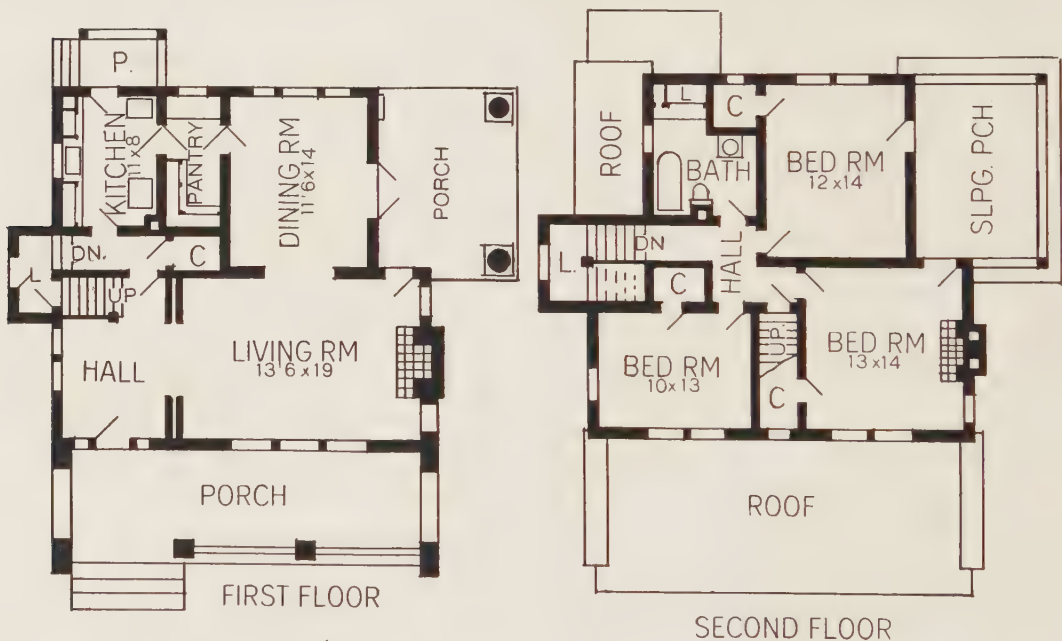
In most localities this design could be built for from \$3,000.00 to \$3,500.00, depending on kind and quality of material used, type of heating plant installed, and grade of plumbing fixtures. All of these items enter into cost, as well as local conditions.

No. 153—Size 28 x 26 feet. Price of Plans \$25.00. Price of Specifications \$5.00.



### A BRICK AND FRAME HOUSE

In this plan the exterior of No. 119 has been preserved with an added feature of a porch off of the dining room and living room, and a sleeping porch off of two bed rooms on the second floor. The plan is No. 119 reversed with above features added and a slight change in location of pantry. A mantle is provided in the main bedroom as well



as the living room and the whole makes a very complete and cozy home.

This house will cost from \$3,500.00 to \$4,500.00, depending on local conditions. Under ordinary conditions it should cost about \$3,900.00.

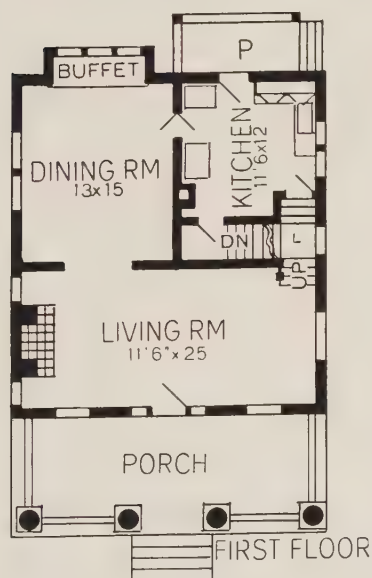
No. 119-R—Size 30 x 29 feet. Price of Plans \$30.00. Price of Specifications \$5.00.



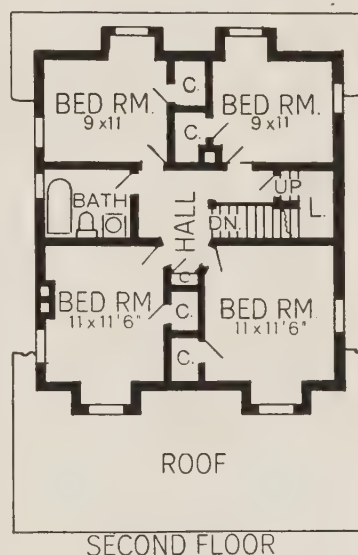


### AN ADAPTATION OF DUTCH COLONIAL

A design bespeaking quiet home comfort and one containing dignity and repose. The lower story is covered with wide siding and the gables and roof are covered with shingles. The large columns supporting the porch roof contribute largely to the beauty of the general scheme, as also the ornamental chimney.



The basement is under the entire house and is built of brick with shale brick or other appropriate brick used for facing above grade. The living room is entered in the center and occupies the entire front of the house, the dining room and kitchen in the rear. In the dining room is provided an alcove to contain a buffet. The second floor is reached by combination stairs from living room and kitchen, and has four good bedrooms, each with large closets, a linen closet and well appointed bath



room. The attic is finished in one large room, and basement extends under entire house.

This design can be built for from \$3,000.00 to \$3,500.00. Thirty-three hundred dollars should build it, with a good grade of material and complete equipment, in most localities.

No. 145—Size 26 x 28 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

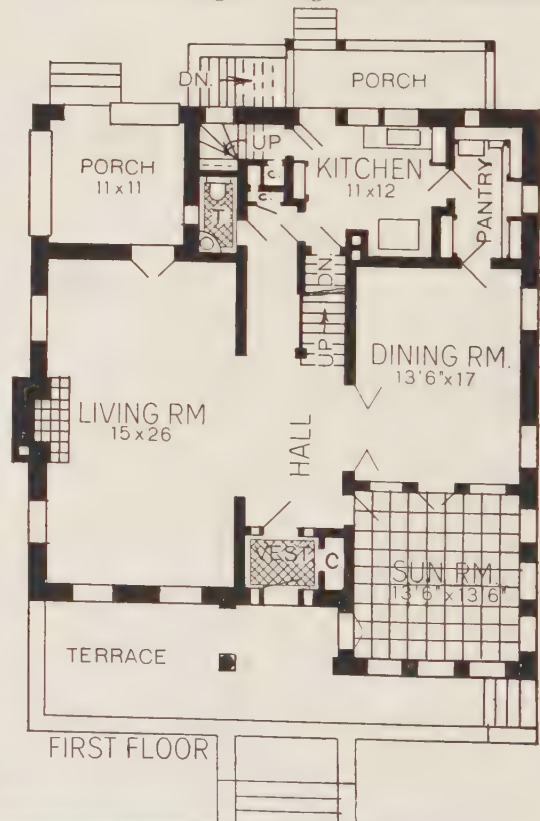


### A HOME OF CHARACTER

This is a rather pretentious design of the modified Colonial type and is shown in large gray shingles with green shingle roof, as built, and in stucco with tile roof, as originally designed. The plans as shown are for tile construction. Both designs show the results which can be obtained by simple, restrained design, along true architectural lines.

A wide brick terrace is carried across the entire front of the house with steps to driveway at one end. The portion immediately in front of entry, only, is covered.

A tiled vestibule leads into the main hall and off of this hall open the living room, dining room and sun room, which also is connected with the terrace and dining room by French doors. Coat closets are provided off of vestibule and at rear of main hall. A toilet room is also arranged at end of this hall. The service portion is provided with every modern convenience, built in cupboards, refrigerator and range with ventilating hood, provision for disposal of garbage, etc. The vistas across hall to dining room and sun room are very beautiful, as also the view from main hall up the stair well through the French doors at head of stairs. The second floor is reached by wide Colonial stairway from main hall, also by separate rear stairs from kitchen, which continue to attic, maids' rooms and bath on third floor. The owner's bedroom and guests' bedroom are particularly attractive rooms, the owner's room having direct access to main bath and guests' room having a private toilet room. The bathroom has



Directions for ordering plans on page 288. For special designs see page 150.

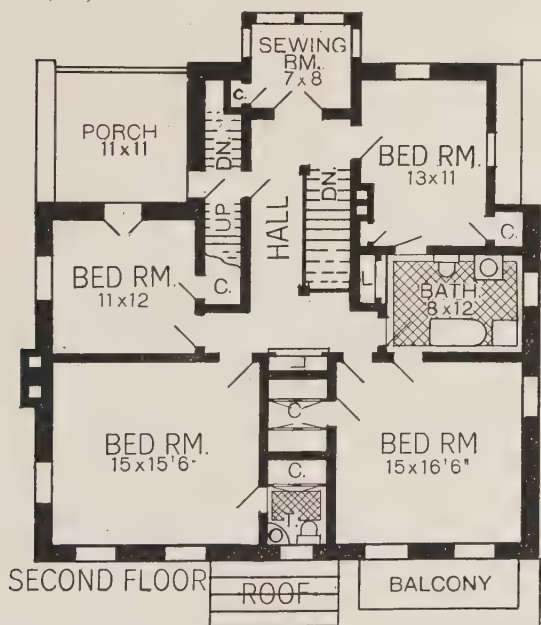




tiled floor, wainscot and trim, tiled-in tub and shower and large closets for towels, etc. Two smaller bedrooms, sewing room and sleeping porch complete this floor. The entire house is finished in white enamel, with mahogany doors. The living room mantel, opening from hall to living room, stair rail, paneling and trim are of pure Colonial design, and carried out in the true Colonial spirit. The sun room is tiled with Welch quarry tiles with tile base and the walls finished in Caen stone, no wood trim being in evidence in this room. The porch at the rear of the living room is enclosed in glass and forms an additional room. Lack of space prevents describing the beautiful decorations, hangings and fixtures, which add the finishing touch to this beautiful home.

The cost to build this design will depend largely on the elaboration of detail as well as quality and kind of materials used. In frame it should be built for from \$9,000.00 to \$12,000.00 or in tile with stucco exterior from \$10,000.00 to \$14,000.00.

No. 174—Size 39 x 44 feet. Price of Plans \$90.00. Price of Specifications \$10.00.

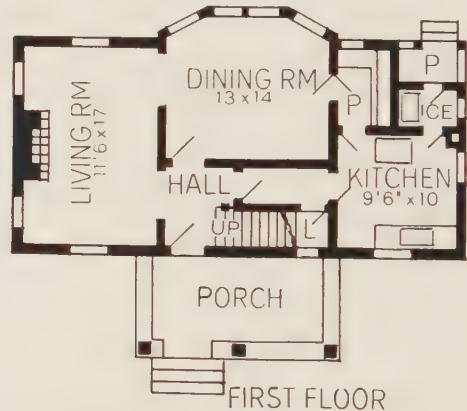
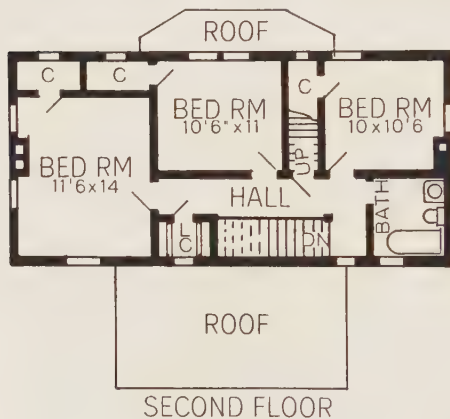


Main Stairs



### A WIDE HOUSE

In this exterior is depicted a house of unusually good lines, because of the extreme frontage, and at the same time of sufficient depth to give the house a good body. The first floor has ordinary lap siding up to the top of the first floor windows and the balance of the house is shingled, while shingles would be appropriate for the roof. The foundation is of brick, as also the porch railing walls.



The house is entered through a small hall, from which a stair to the second floor rises and off of which open both the living room and the dining room. A pantry is provided between the dining room and kitchen and an ice room and kitchen porch is arranged off of the kitchen. The living room, dining room, main bedroom and upper and lower halls have hardwood floors and finish and the two remaining bedrooms are finished in pine with hardwood floors, while the bath is white enamel. The bath is placed over the kitchen and between the two rear bed rooms a stairway is arranged to the attic.

Three thousand dollars should build this house under average conditions. Under favorable conditions it could be built for \$2,700.00, but in a large city or under expensive conditions the cost might run to \$3,500.00.

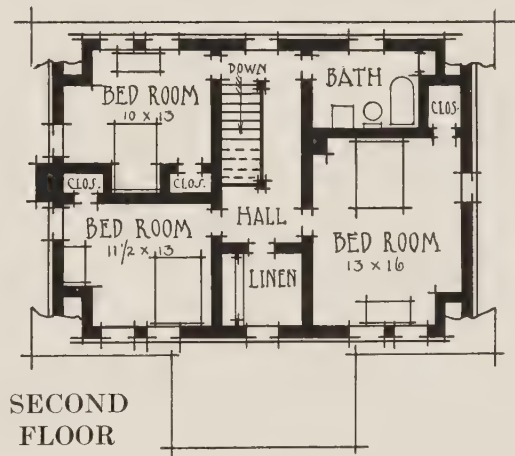
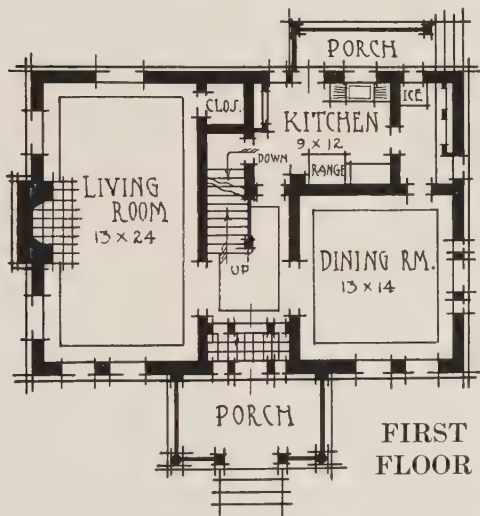
No. 154—Size 37 x 18 feet. Price of Plans \$25.00. Price of Specifications \$5.00.





### ENGLISH—PLASTER AND SHINGLES

Rough and rugged as its environment, this English plaster and shingle house has called forth much favorable comment. With other surroundings the detail of rafter ends, brackets, etc., should be slightly refined; the general design would tie itself to any landscape.



The plan is similar to many of its type with a center hall, large living room at one side, a square dining room at the other and a kitchen with a butler's pantry at the rear. The kitchen connects through hall with the front door. Closet off living room could open from the kitchen if desired or the space taken for a rear grade entrance to the kitchen and basement. The second floor contains three large bedrooms, a linen or sewing room, and an unusually large bathroom with a linen cabinet. Basement under the entire house.

Cost \$3,500.00. Can be built for from \$3,100.00 to \$4,200.00.

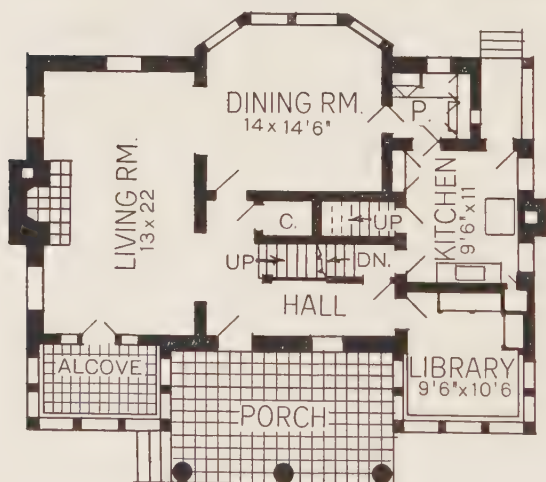
No. 116—Size 34 x 24 feet. Price of Plans \$27.50. Price of Specifications \$5.00.



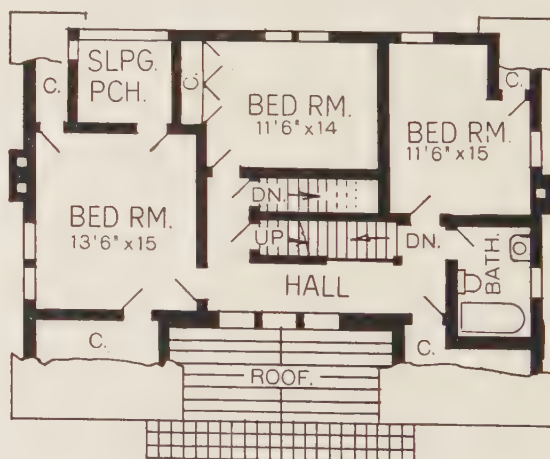
AN ENGLISH HOUSE

This house is built of a rough red brick to the top of the first floor windows and in the central dormer the brick is carried to the top of the second floor windows, while the gable ends are carried out in half timber with plaster panels. The wall space of the alcove and library is filled with windows elevated sufficiently above the floor to provide ample room for bookcases or other furniture. The long hall in the front with the stairway to the second floor provides for the seclusion of the library from the rest of the house and at the same time convenient access to the front door is made directly from the kitchen without passing through any of the rooms.

The living room occupies the entire end of the house and the dining room opens off of it and also off of the main hall. The kitchen is separated from the dining room by means of a pantry and is provided with every necessary kitchen accessory. The second floor is divided into three bedrooms and a bath, with a sleeping porch off of the main bedroom. The porch upon the front has a tiled floor and is terraced to the main grade



FIRST FLOOR



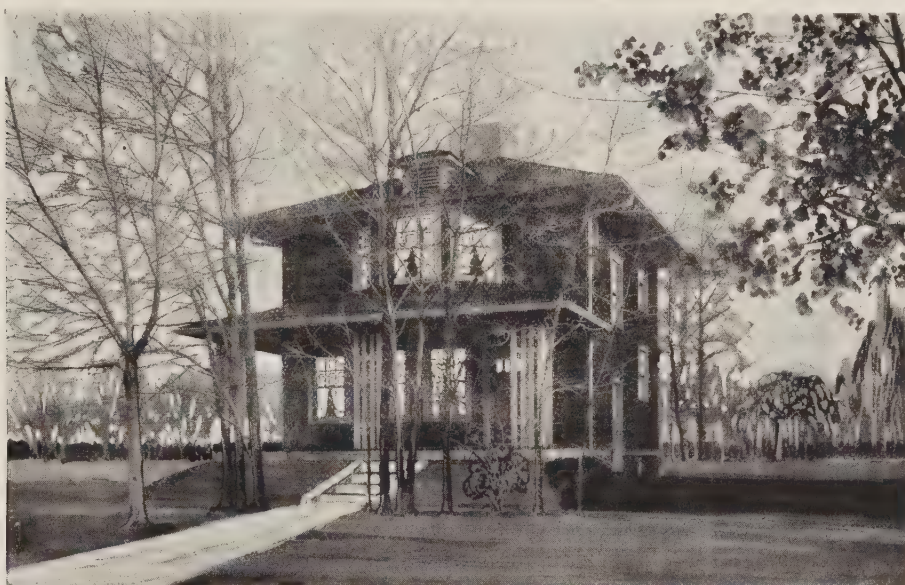
SECOND FLOOR



line so that a railing is unnecessary around this porch, while a small flight of stone steps is provided at one end of the porch. This plan and exterior is one that will be appreciated by those who desire a house carried out in good architectural design with all the conveniences of a modern home. A more complete description of this house will be gladly given upon application.

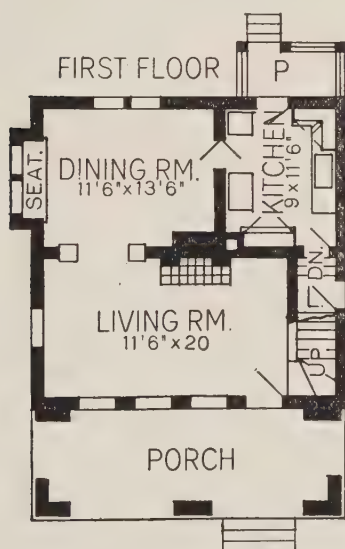
This house should not cost to exceed \$6,000.00 under most unfavorable building conditions, and under favorable conditions should be built for \$5,000.00; \$5,250.00 would be a fair average cost.

No. 143—Size 41 x 31 feet. Price of Plans \$45.00. Price of Specifications \$5.00.



### A SQUARE SHINGLED HOUSE

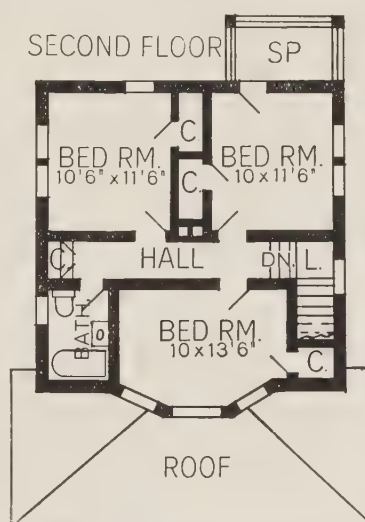
The distinctive features of this design are the large shingles used on the exterior in place of siding, the large plastered chimney and the lattice columns supporting the porch roof. In plan this design is very similar to our No. 164, the principal difference being that



the space occupied by hall and living room in No. 164 is all thrown into the living room and the stairs lead to the second floor direct from this room. The second floor is the same as No. 164. A very compact and economical plan to build and contains all the essential features of a complete home.

As built this house cost about \$2,400.00. It should be built for from \$2,000.00 to \$2,500.00.

No. 182—Size 24 x 24 feet. Price of Plans \$20.00. Price of Specifications \$5.00.



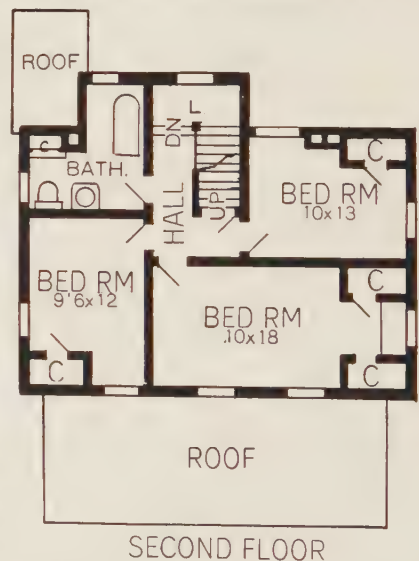
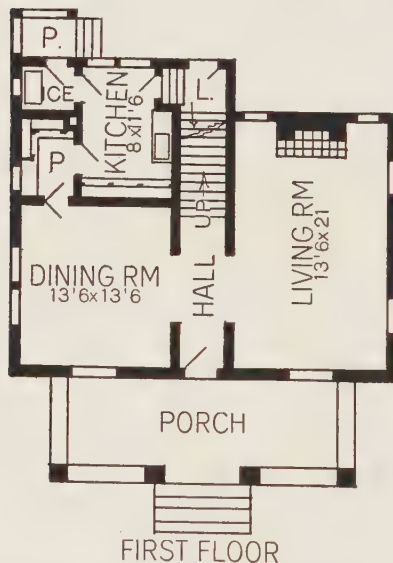


### A SIMPLE SHINGLE HOUSE

This little house, of the Dutch Colonial type, while inexpensive, is one that possesses a simple charm. The side walls and roof are in shingles and can be stained such colors as would be desired by the purchaser, but the most harmonious scheme would be to have the shingles brown, as also all of the exterior woodwork, with the roof shingles a very

much darker brown and the sash painted white or cream.

The floor plan has a center hall with the dining room and living room on each side and the stairs extending up from the hall to the second floor. The kitchen has an ice room and a pantry and a rear porch with stairs to grade landing and cellar. The second floor has



three bedrooms, all of ample size, and a small hall. The attic is reached by a stairway from the second floor hall and the bathroom is over the kitchen.

This design would be very attractive with the entire interior enameled white, with birch doors, stained to imitate mahogany. The first floor would be equally attractive in hard wood, stained and waxed.

This house could be built in most localities for from \$3,000.00 to \$3,500.00.

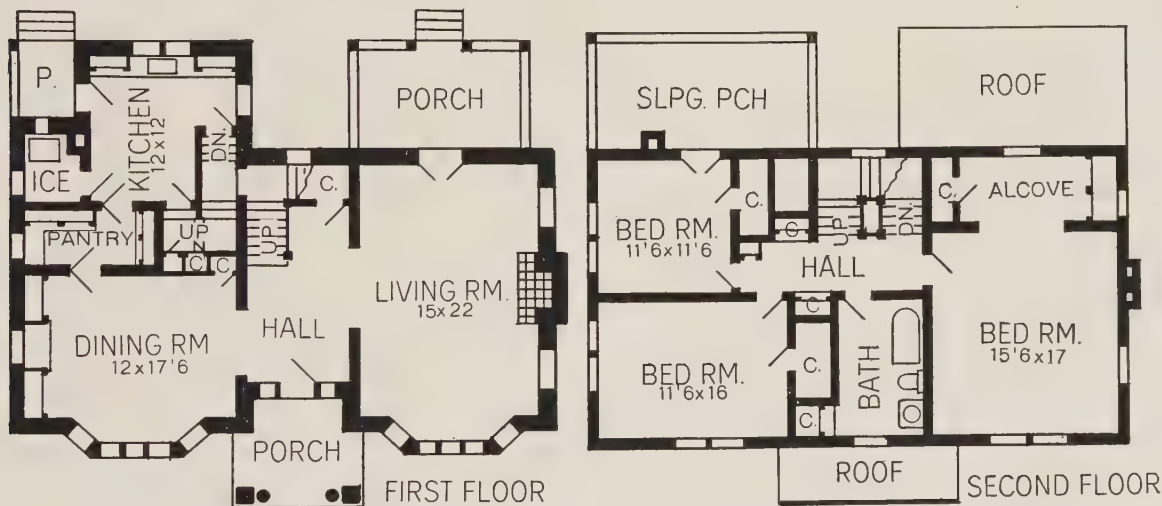
No. 157—Size 32 x 26 feet. Price of Plans \$25.00. Price of Specifications \$5.00.





AN ENGLISH SHINGLE HOUSE

A house possessing good character and style, which is done in cement on hollow tile to the top of the first story windows, with casement bay windows for the dining room and living room. The entire second floor and roof is in shingles, the side walls being stained grey and the roof brown. The chimney is in red brick and all trim is stained brown.



The plan is one of the center hall type. A porch is placed off of the living room in the rear and the entrance is formed by a stoop covered by a carefully executed hood. The living room occupies the entire right hand side of the hall and on the left hand side are the dining room, kitchen, pantry and ice room. The kitchen has a separate rear porch. The second floor has three bedrooms and a sleeping porch and has a bathroom placed over the center hall. The attic may be divided into a servants' room and a large room, or in any other manner desired.

Cost as built \$4,500.00, which cost could be reduced in some localities.

No. 161—Size 43 x 31. Price of Plans \$40.00. Price of Specifications \$5.00.



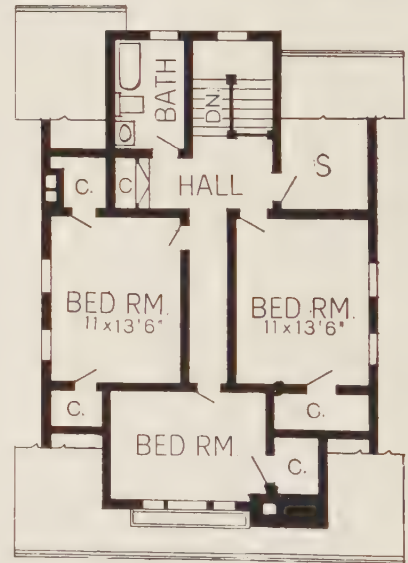
A VARIATION OF NO. 105

This is another modification of the original No. 105, except that the vestibule and a part of the alcove nook have been omitted thereby making the porch larger and a window has been placed on each side of the front chimney instead of in the alcove nook.

The floor plan provides for a hall and the stairs from the rear of the living room



with a door from this hall into the kitchen and a porch of approximately the same size as the front porch opening off the rear of the living room. This living room is a foot wider than the living room shown in the other designs of the No. 105 Series. The second floor provides for three bedrooms, storage room under the roof and



bath. The space occupied by the side porch can be utilized as a den or library as in 105-A or 105-B, with a sleeping porch or bedroom over, in place of the storage room.

This design can be built for a little less than Nos. 105-A and B, and should not cost to exceed \$3,300.00 under the most expensive building conditions; \$3,000.00 would be a fair average cost.

No. 105-C—Size 26 x 36 feet. Price of Plans \$27.50. Price of Specifications \$5.00.



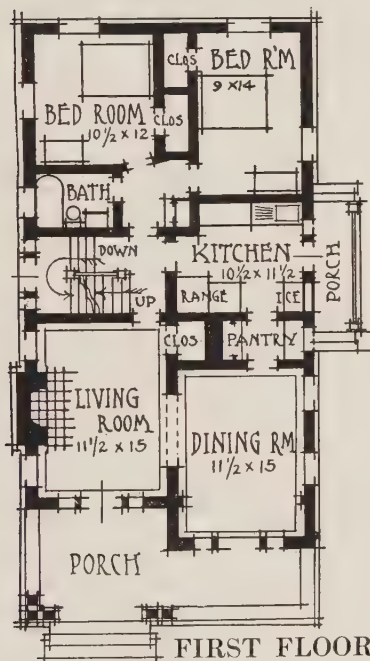


### A CEMENT BUNGALOW

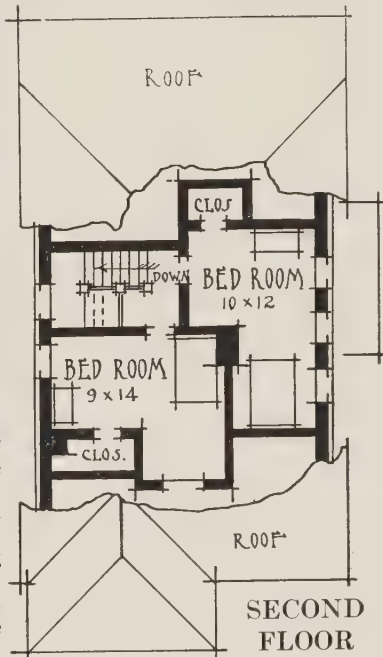
It is difficult to adequately describe the beauty and artistic merit of this bungalow without "overworking the superlatives." The half-tone reproduction speaks for itself and a technical description is more enlightening. The exterior is cement on hollow tile, water-proofed and cream white in color. Trimmings and all woodwork are stained

brown and window sash painted cream white. The roof is slated, but shingles stained gray, green or brown would be equally effective, and if the expense of a tile roof can be borne the bungalow would be very striking in appearance. The foundation and porch parapet walls are of red brick laid up in white mortar.

The living room and dining room have light on two sides and a large closet is provided off the living room for coats and wraps. A pantry connects dining room and kitchen, both of which are arranged with ample cupboards. The refrigerator is wide and



FIRST FLOOR



SECOND FLOOR

low and arranged to be iced from the outside. Two bedrooms and a bathroom on the first story and two bedrooms on the second or attic story with large linen closets, etc., complete the house. The basement extends under the entire structure.

Cost \$3,000.00. Built in frame, for a summer cottage, this house could be built for \$1,300.00. In tile, under expensive building conditions the cost might run from \$3,800.00 to \$4,000.00. Plans for this bungalow are also furnished in 26, 28 and 30-foot widths at the same price.

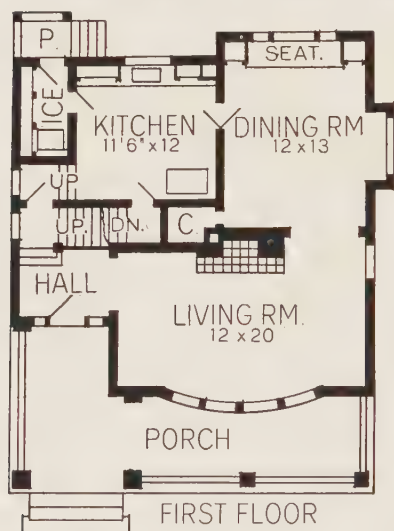
No. 110—Size 24 x 44 feet. Price of Plans \$25.00. Price of Specifications \$5.00.



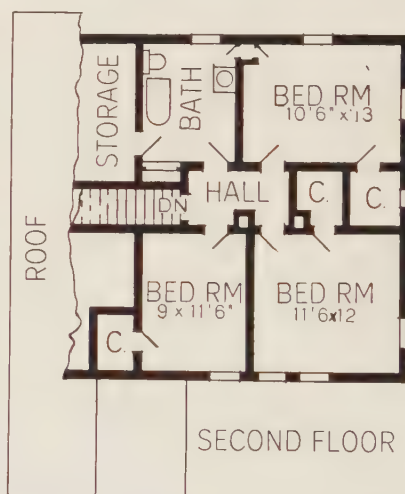
A SIX-ROOM COTTAGE

This house is developed with wide siding to the top of the first floor windows and shingles stained a rich brown from that point to the eaves and in the gables. The porch is partially covered and has a floor across the entire front.

The living room takes up the space at the front of the house with exception of a



small stair hall, and the dining room and kitchen are on the rear. The second floor is reached from the stair hall as well as from the kitchen and the basement is reached from the kitchen under the main stairs. The kitchen sink is placed under a window and cross ventilation in the kitchen is provided by



the window on the combination landing to the second floor. The dining room has a window seat with china cabinets at each side and a recess for the buffet. The second floor has three bedrooms with a large bath and storage room under the roof. A novel feature of this plan is the dividing of the chimney on the second floor in such a manner that it appears above the roof on the center of the gable, a very commendable feature for exterior effect and gained by arching the chimney at the second floor.

Under average conditions this house will cost from \$3,500.00 to \$4,000.00.

No. 219—Size 30 x 28 feet. Price of Plans \$30.00. Price of Specifications \$5.00

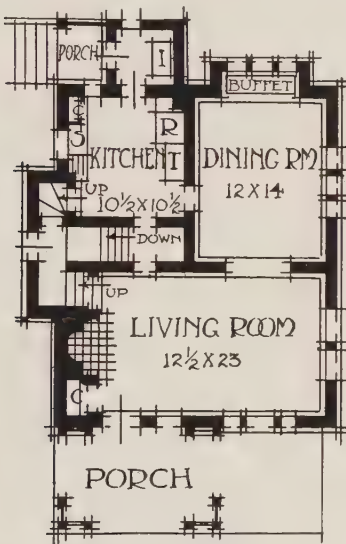




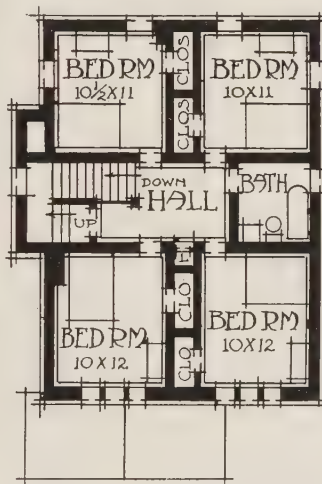
### A HALF TIMBER TREATMENT

This modified English treatment of a time tried plan is most modern and artistic. This home is of frame construction with siding on the first story, half timber work with panels above, and latticed columns supporting the pergola covered porch.

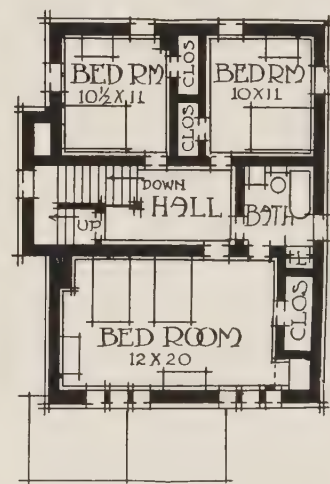
A novel treatment of the end of the living room is obtained by arranging the fireplace beside the



FIRST FLOOR



SECOND FLOOR (a)



SECOND FLOOR (b)

stairs and placing a seat or a coat closet, at the other end of the mantel. The home contains seven rooms, with bath, a well lighted attic, ice room, combination stairs from kitchen and living room, basement under entire house and grade entrance to the basement. The second floor (b), containing three rooms, is optional, no changes being required upon the exterior. Cost \$2,800.00. Minimum cost \$2,600.00; maximum \$3,500.00.

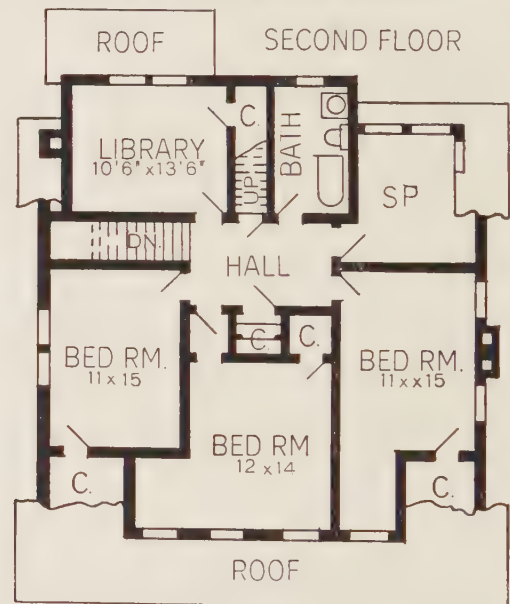
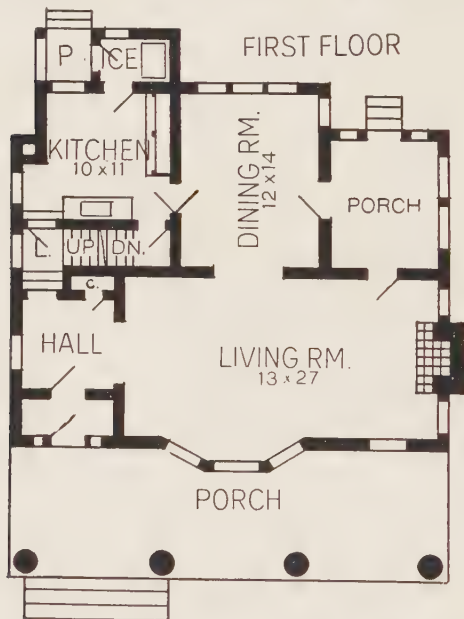
No. 139—Size 24 x 28 feet. Price of Plans \$20.00. Specifications \$5.00.

N. B.—This plan is carried in stock in the following sizes: 22 x 26, 24 x 28, 26 x 30 and 28 x 32 feet. Please mention size desired in ordering.



A MODERN HOME

In this design the long and low effect has been sought for and at the same time sufficient height is provided in the gables to keep the second floor bedrooms cool. Ordinary lap siding has been used as a wall covering and the roof is covered with shingles.



The floor plans call for a basement under the entire house and the first floor has a living room, dining room and hall finished in plain oak, stained a rich dark brown. The second floor is reached by combination stairs from both the kitchen and main hall and has three ample bedrooms, a library, bathroom, and a sleeping porch.

This house cost about \$5,600.00, and should be duplicated for this sum. In the smaller cities and towns it could be built for considerably less.

No. 176—Size 38 x 28 feet. Price of Plans \$35.00. Price of Specifications \$5.00.



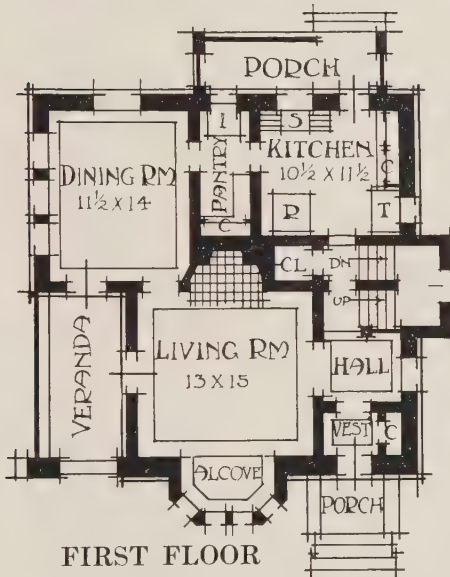


### A MODERN GERMAN TYPE

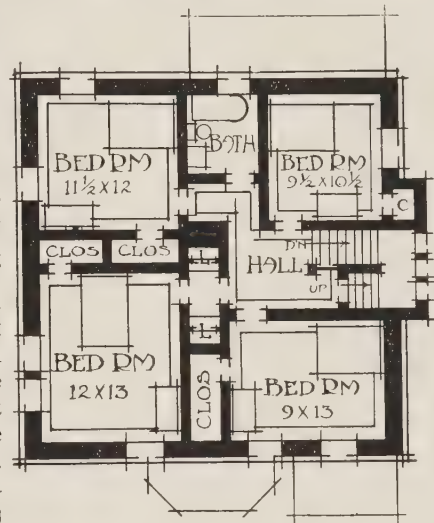
This is a type of cement house having the feeling of modern German work. The absence of the porch, the bay window on the center of the gable in the front, and the treatment of the stair bay give this house the character and snap which has made it so popular with our friends. The walls being buff colored with the exterior woodwork

stained brown and sash painted white, together with the green slate roof and red brick foundation, compose a color scheme which is livened by a touch of brilliant color in the flower box over the hood and also in the flower boxes at each side of the entrance stoop.

A little study of the plan will show how thoroughly every-



FIRST FLOOR



SECOND FLOOR

thing that goes to make an artistic home has been worked out. Attention is called to the veranda opening off the dining room as well as the living room. The second floor has four bedrooms, each with ample closet, linen closet, bathroom, a well-lighted hall and stairway to attic. The basement extends under the entire house and is reached from the grade entrance landing under the main stairs and from the kitchen, or through the hall from the living room. Sufficient space to be finished off as a billiard room or divided into additional bedrooms is provided in the attic.

Cost \$5,400.00. Can be built for from \$4,100.00 to \$6,000.00.

No. 124—Size 31 x 29 feet. Price of plans \$35.00. Price of Specifications \$5.00.



### A COBBLESTONE AND SHINGLE HOUSE

This house is one that presents a low and rambling effect, both in plan and in the exterior view. The porte-cochere at one end and the circular porch at the other end makes this house look a great deal longer and more expensive than it really is. The combination of cobble or field stone with the shingle walls and roof is very good and it is seldom that a circular tower affords as an artistic relation to the whole as is shown in this house.

The stairway goes up from the central hall off of which open the living room on one side and the dining room and library or parlor on the other. Off of both parlor and dining room a sun room is provided, through which entrance is gained from the porte-cochere. The kitchen is separated from the dining room by a pantry and is accessible to the second floor by a combination stairway and to the basement by a stairway to a grade landing and then on down to the basement. The second floor has four large bedrooms and a bathroom, together with a very elaborate upper hall. This is a house admirably suited for entertaining or for the wants of a large family.

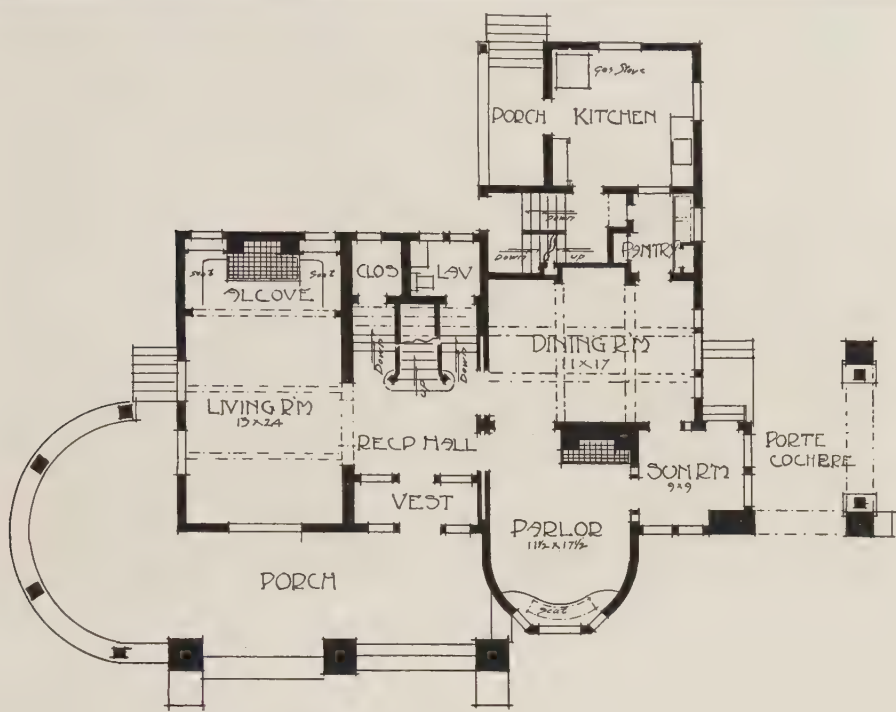
At present prices this house would cost about \$7,500.00, but this cost will vary with local conditions. On receipt of information blank, properly filled out, we will send an accurate estimate of cost of this or any other design.

No. 208—Price of Plans and Specifications \$75.00.

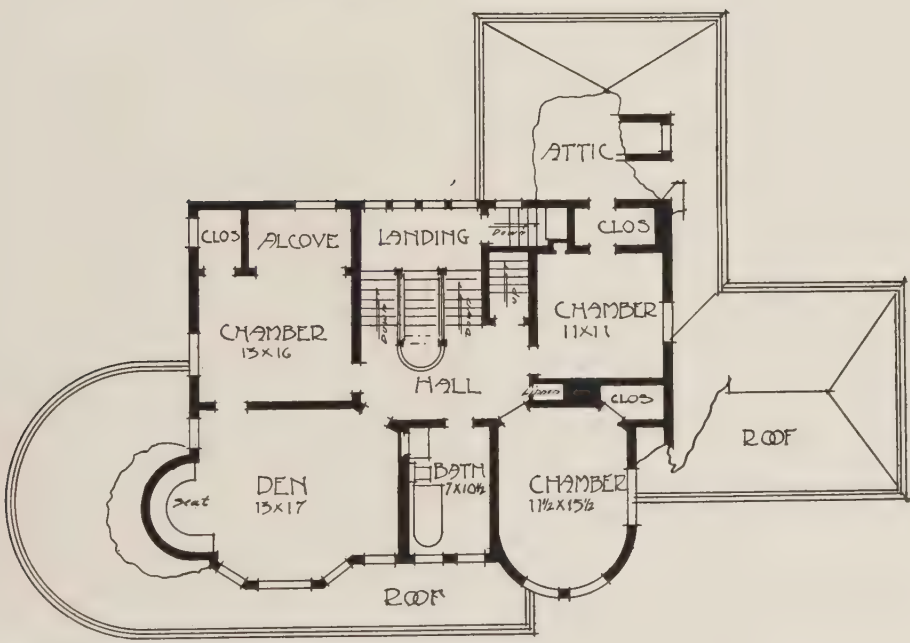


Stairway in No. 208





- FIRST FLOOR PLAN -  
No. 208

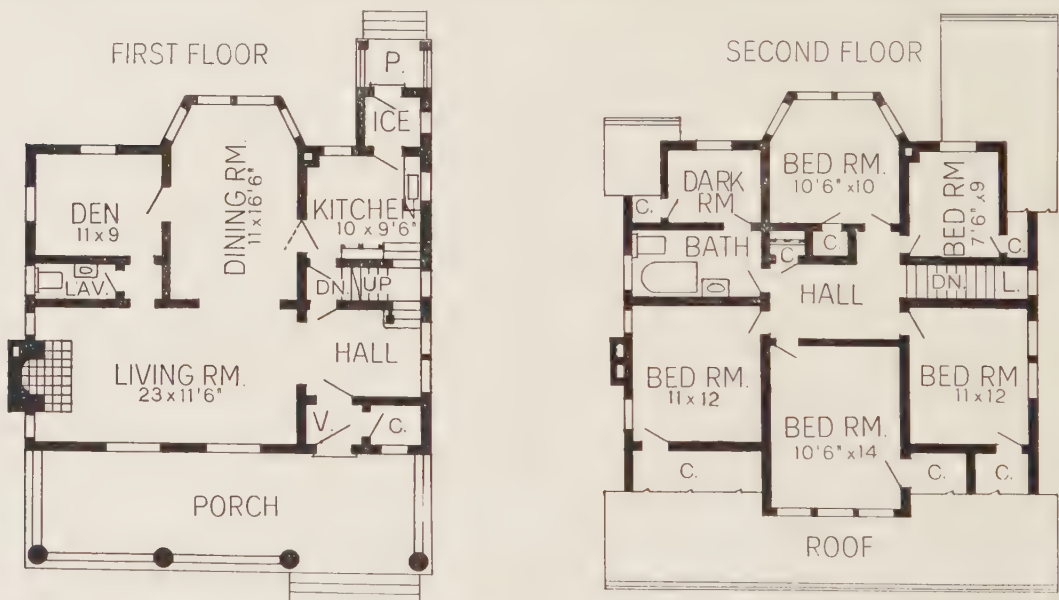


- SECOND FLOOR PLAN -  
No. 208



### ROUGH BRICK AND WIDE SIDING

This house, while in plan similar to No. 106, has been carried out in an entirely different exterior by the use of brick from the grade to the top of the first floor windows, wide siding in gables and shingle roof. The hip roof on the dormer as also over the small attic windows gives the design an individuality that is not common. The porch rail-



ing is worked out with boards equally spaced with a pattern sawed in the edges of each, which contributes to the individuality of the design.

The hall is entered through a vestibule, off of which is a coat closet and the living room occupies the rest of the front of the house. The dining room opens off of the rear of the living room with a large bay window. There is a den and lavatory accessible from both the dining room and living room. The kitchen has a combination stairway to the



second floor which has four large bedrooms with a small fifth bedroom, which makes a convenient child's room or sewing room. A dark room for photography is provided off the bathroom, where a sink and running water is installed.

Except in the larger cities where building costs are of necessity high, this house should be built for about \$4,000.00.

No. 106-R—Size 35 x 26. Price of Plans \$30.00. Price of Specifications \$5.00.



### A CALIFORNIA BUNGALOW

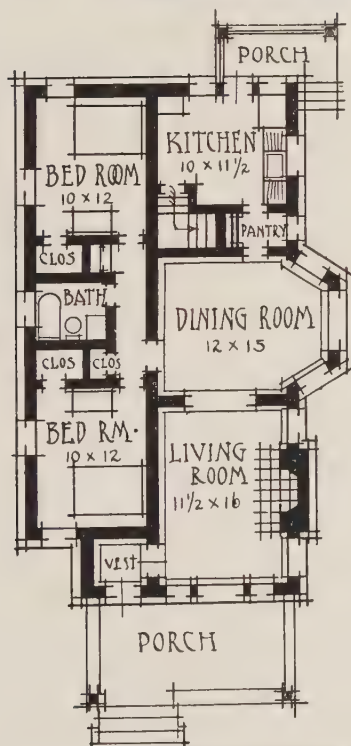
This is a small bungalow of the California type; of frame construction with stucco exterior and shingle roof. The chimney is of brick. This is one of the best small plans in this collection.

The entrance is through a small vestibule. Living room, dining room and kitchen occupy one side of the house with a pantry between the dining room and kitchen. Two bedrooms and bathroom, closets and linen closet are on the other side, and a stairway leads from the kitchen to the basement. The attic, which in this plan is very low can be used for storage. An opening can be made between living room and front bed room and that room used as a den, in the event of only one bedroom being needed. The basement is just sufficient to contain the heating plant, coal room and laundry.

The plan as shown is 22 feet in width, but can be furnished in 24 and 26-foot widths. Please mention width desired in ordering.

Cost \$1,900.00, as shown. Under most expensive building conditions cost should not exceed \$2,500.00; as built in the South or West this bungalow could be built for \$1,000.00.

No. 111—Size 22 x 42 feet. Price of Plans \$15.00. Price of Specifications \$5.00.

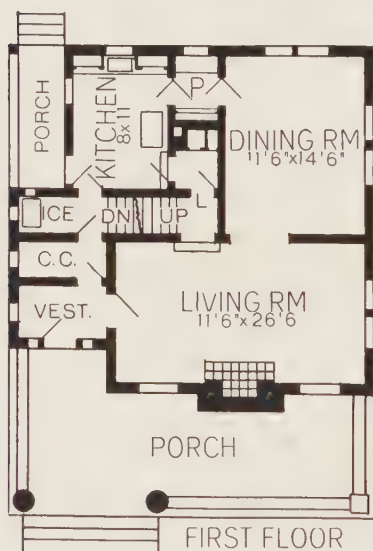




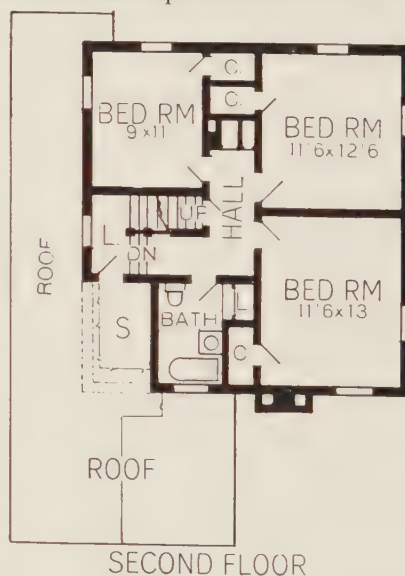
### A SIDING AND HALF TIMBER HOUSE

This plan is an adaptation of our No. 101 and shows the possibility of combining wide lap siding with plaster panels, with the English half timber effect in gables.

The large living room across the front with the mantel on the front wall is a novel treatment, which at the same time affords abundance of window space to the front on



each side of the fireplace. The dining room, which faces to the rear, has two low windows on the rear and two high windows on the side wall and is served from the kitchen through a convenient pantry. The kitchen is of sufficient size to provide everything in the way of kitchen necessities and ample cupboard space. The refrigerator is so placed that it can be iced from the rear porch



without entering the house. The second floor is divided into three good sized rooms with the bathroom in the front and each room has an ample closet, while the linen closet opens from the bathroom. There is a storing space provided off of the stair landing underneath the roof, in addition to a small attic.

Ceiling heights—first story 9 feet, second 8 feet 6 inches. Estimated cost \$3,500.00. Can be built for from \$3,000.00 to \$4,000.00, depending on local conditions and kind and quality of materials used.

No. 171—Size 29 x 27 feet. Price of Plans \$25.00. Price of Specifications \$5.00.





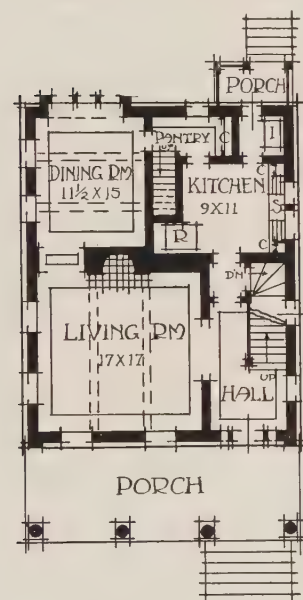
### AN EXTREME COLONIAL TYPE

An extreme Colonial type of home appeals to many who admire a plain and stately exterior. It is a most imposing home for its size and cost. This home was planned to meet three requirements—a large living room, a separate rear stairs and not to exceed 26 feet x 32 feet in size. A brief inspection of the plan will show how this was

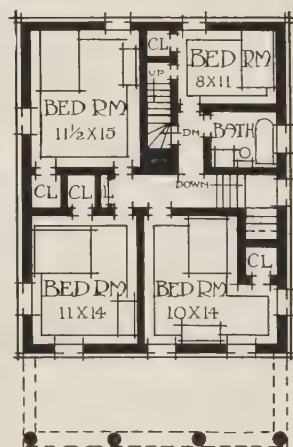
worked out without eliminating other desired features. The detail of the interior finish is carried out in the same severe Colonial lines as the exterior, while the decorations and the electric fixtures increase the thoroughly homelike and restful air of this old-fashioned Colonial home.

This plan can be furnished with various types of exteriors, such as Nos. 175, 139, 144 or 164.

In this connection we wish to explain that we can vary exteriors of all the designs, shown in this book, to meet the personal preferences of clients; and will be glad to answer inquiries concerning such changes. We can also change materials and forms of construction to meet local or individual requirements. This design cost \$4,000.00 complete, as built with hot water heat, good plumbing and a good grade of material and workmanship throughout. Under favorable build-



FIRST FLOOR



SECOND FLOOR

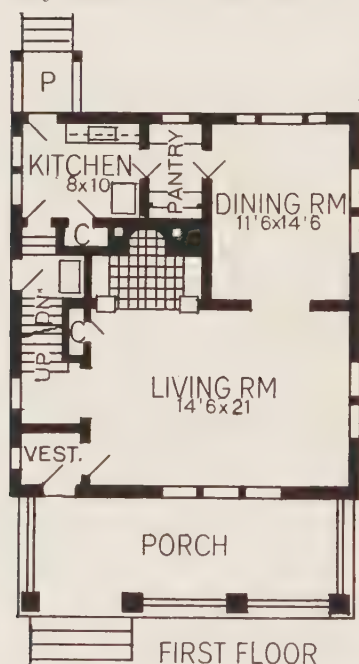
ing conditions it could be built for about \$3,600.00. Using the most expensive materials and under expensive conditions the cost should not exceed \$1,500.00.

No. 128—Size 26 x 32 feet. Price of Plans \$30.00. Price of Specifications \$5.00.



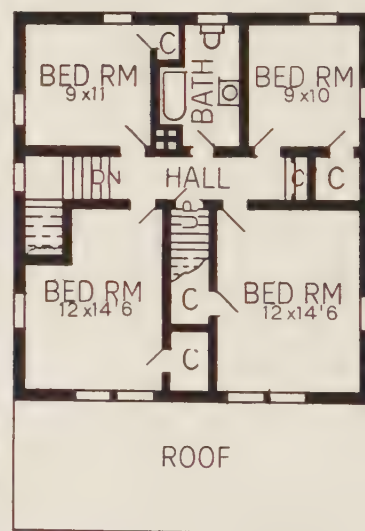
### REMODELED FROM AN OLD BARN

This design is included in this collection to illustrate what can be done in remodeling. The exterior and floor plan were made from the drawings we prepared for remodeling an old barn, in which the timbers were good, and which was made into a very comfortable and artistic home.



The large living room with fireplace and inglenook, well lighted dining room with convenient pantry and kitchen, make an attractive first floor, while the four bedrooms, each with a large closet, and a well appointed bathroom, will meet the needs of a large family. The attic is small but affords ample storage room.

The cost of remodeling this barn into an attractive house was about 60 per cent. of what it would cost to build a new house of the same size. Our charges for preparing the plans and specifications for the work were \$75.00 and the result speaks for itself.



We will cheerfully furnish estimates of cost of remodeling, and cost of plans for this class of work. Blanks for furnishing required data will be forwarded on request.

We considered this design of sufficient merit to place in stock.

No. 187—Size 28 x 30 feet. Price of Plans \$20.00. Price of Specifications \$5.00.

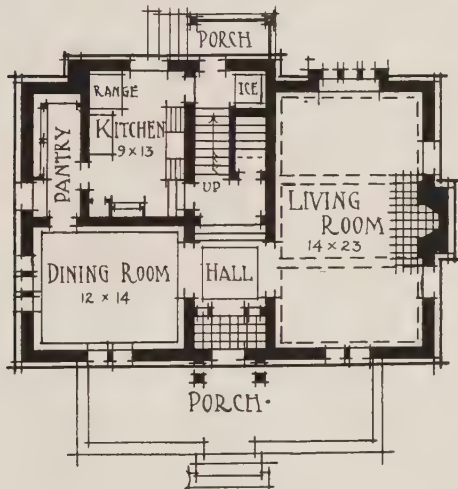




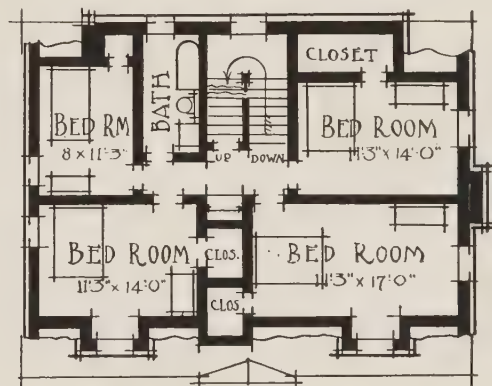
## DUTCH COLONIAL LINES

Another home of which the Dutch Colonial house is the prototype. The first story of this home is lap siding. Second story and roof are covered with cedar shingles, dipped in oil and left to weather. The chimney is rough shale brick laid in white mortar. In ordering plans for this house a covered porch can be had without extra cost.

Access to porch, through wide French windows, from both dining room and living



FIRST FLOOR



SECOND FLOOR

room gives an air of openness to the entire lower floor. There is a large coat closet on a slightly raised landing under the stairs. At the rear, ice room is provided, with entrance to cellar and to kitchen. The living room has a beamed ceiling and a large fire-place on its longest wall. The first floor plan is complete and roomy and smacks of coziness from every viewpoint. The second floor plan contains a conveniently located bathroom and four bedrooms. The attic is unfinished, but spacious enough for two bedrooms. A basement is provided under the entire house.

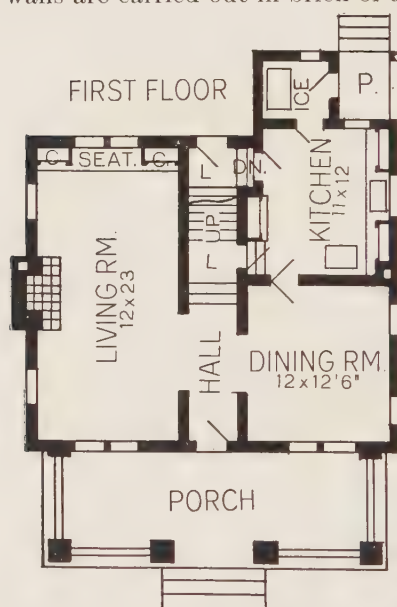
Cost complete including decorations and electric fixtures \$4,500.00. Can be built for from \$3,500.00 to \$4,500.00.

No. 125—Size 36 x 24 feet. Price of Plans \$37.50. Price of Specifications \$5.00.



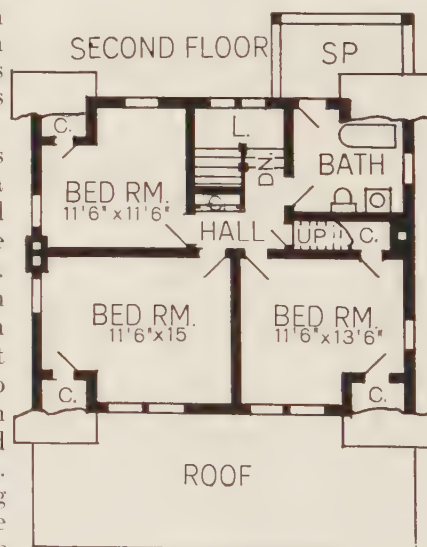
### A SIX-ROOM HOME

In this design the main roof eaves are brought down below the top of the second floor windows in order to give the effect of a low house. The first story is in wide siding and the second floor and gables are in shingles. The chimney and the foundation walls are carried out in brick of a mottled color tone, while the shingles on the roof and



side walls are stained brown with the siding cream and the trimmings and porch columns in white.

The first floor is provided with a narrow center hall which reduces the size of the house. The living room and dining room are to the front and the stairs go up in combination from the hall and from the kitchen. The grade landing stairway to the basement extends off of the kitchen



and an ice room and porch is provided at the rear. The second floor having three bedrooms and bath is nicely arranged with reference to the small second floor hall and a stairway is provided off of the hall to a small attic, which has windows at each side. Basement extends under entire house, and contains hot air furnace and complete laundry equipment.

This design could be built in most localities for from \$2,500.00 to \$3,000.00.

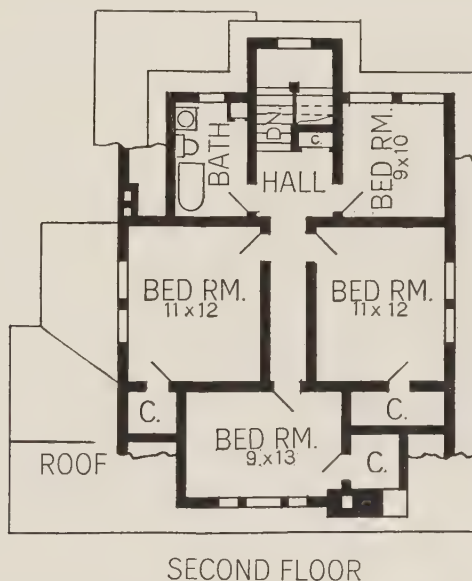
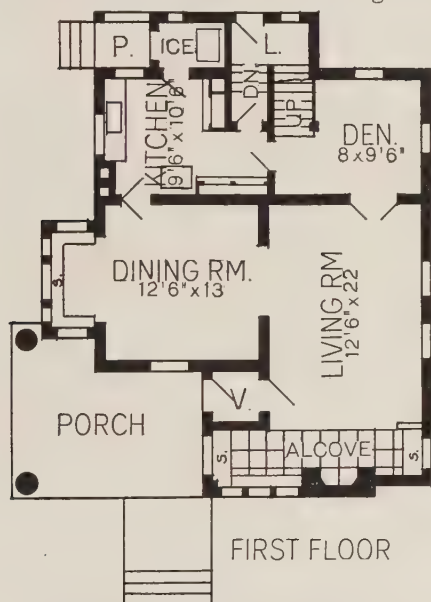
No. 191—Size 30 x 24 feet. Price of Plans \$20.00. Price of Specifications \$5.00.





A DEVELOPMENT OF NO. 105.

This exterior is the same as our No. 105 except that the porch is extended out to one side, which increases the size of the porch and gives the exterior a wider aspect without widening the body of the house and with a very slight additional cost. Shingles are substituted for the wide siding.



The floor plan provides for a window seat off the dining room, backing up the porch, and a den at the rear of the living room, grade landing to the cellar and three bedrooms on the second floor with an open sleeping porch or bedroom on the rear. Bath room is located over the kitchen.

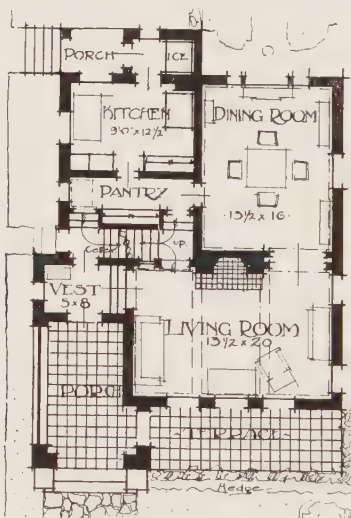
This design has been built a number of times at costs ranging from \$2,500.00 to \$3,500.00. Local conditions as well as quality and kind of materials used govern cost.

No. 105-A—Size 26 x 36 feet. Price of Plans \$27.50. Price of Specifications \$5.00.



### AN ENGLISH PLASTER HOUSE

This is a type of modern English architecture in mass, detail and color. The outside is plastered over hollow tile or brick and tinted cream white. The window sills and porch steps are of brick set on edge with cement mortar. The barge board, eaves and window frames are stained a rich nut brown and the roof is covered with slate. The



FIRST FLOOR

window sash and muntins are painted white. The terrace and porch are floored with cement marked off in squares to imitate tile and the terrace is surrounded by a low English privet hedge. If necessary to lessen the cost, the exterior may be developed in lap siding.

The large living room across the front is exceedingly well lighted and has a fireplace dividing it from the dining room. The stairs lead from the living room to second floor and also in combination from the pantry. The kitchen is amply lighted and well arranged with the sink placed for best light and the refrig-



SECOND FLOOR

erator set in a separate cold room. The pantry is also well lighted and has a china closet with a lower counter shelf containing flour bin, drawers and cupboard and a drop work table is placed under the window at one end. It will be noticed that the front door is slightly depressed from the floor level of the house. The second floor contains three good bedrooms with large closets, bathroom, linen closet, a well lighted stair hall and stairway leading to an unfinished attic. Basement under the entire house.

This design should be built as described for about \$4,500.00. In frame the cost should not exceed \$3,500.00.

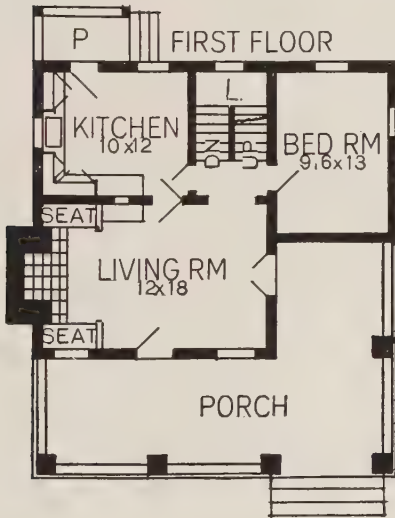
No. 101—Size 28 x 33 feet. Price of plans \$30.00. Price of Specifications \$5.00.



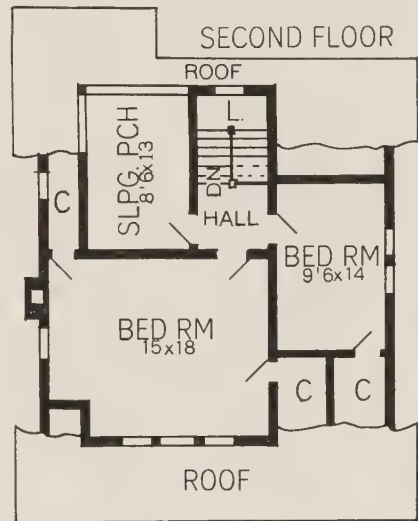


### A SMALL SUMMER COTTAGE

In this as in our No. 210 the artistic possibilities of a small home or cottage are shown. The side walls are carried out in wide siding, a feature so often used in our designs because of the broad effect which is given by this material, with a shingle roof and the foundation of stone, concrete block or brick.



The first floor plan provides for a combination living and dining room and a kitchen and bedroom. Two bedrooms are provided on the second floor with an open air sleeping porch. Each room has an ample closet and the entire plan and exterior is admirably suited for Sea Shore Cottage or Summer Home use.



The bedroom on first floor can be changed into a dining room if desired, and a bathroom installed on second floor, both of which changes would be desirable if the house is intended for all the year round use.

This cottage could be built for from \$800.00 to \$1,200.00, depending on equipment and grade of materials used.

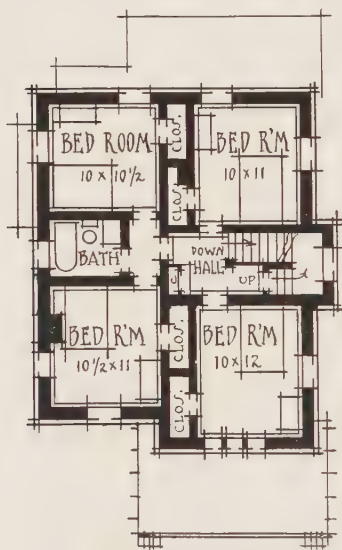
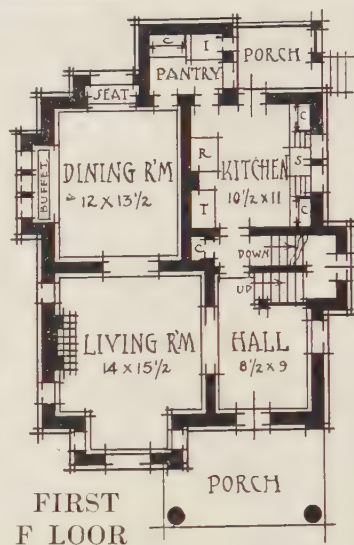
No. 184—Size 29 x 24 feet. Price of Plans \$10.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.



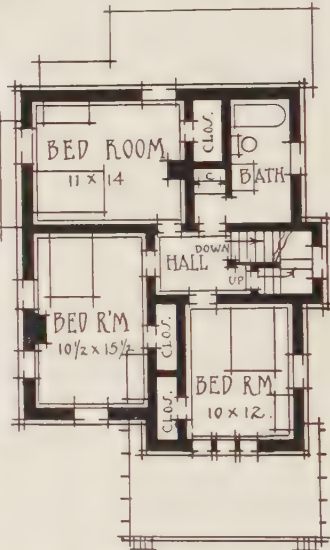
### A QUEEN ANNE TREATMENT

This artistic treatment of a conventional plan is favored on account of its character and the life and vim the design possesses. It is a thoroughly livable and pleasing home. The first story is of wide siding, the second story shingles and the gable ends and second story projection cement and half timber work. The porch roof is



carried on trellis beams which in turn, are supported by massive wood columns. The earth is terraced up close to the porch floor level, which floor is cement, marked off into squares.

Three rooms, pantry and reception hall are contained upon the first floor of this plan and the second floor contains four bedrooms and bath. However, at purchaser's option, a second floor may be selected containing three bedrooms considerably larger, as slight changes only, such as omission or transposition of windows, being necessary. The house contains an attic and a basement under the entire building with grade entrance from outside.



Cost \$2,800.00. Minimum cost \$2,600.00; maximum cost \$3,500.00.

The variation in cost will depend on kind and quality of materials used, local building conditions, and the heating and plumbing equipment installed.

No. 138—Size 24 x 28 feet. Price of Plans \$20.00. Specifications \$5.00. Plans with both second floors \$25.00, and Specifications \$5.00.

N. B.—This plan is carried in stock in the following sizes: 22 x 28 feet, 24 x 28 feet, 26 x 30 feet and 28 x 32 feet. Please mention size desired in ordering, also which second floor plan is desired.





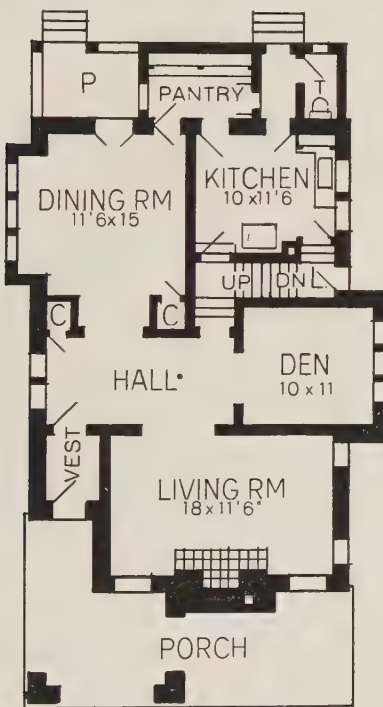
### A CEMENT AND HALF TIMBER HOUSE

The general design of our No. 101 gave rise to this development. The floor plan is entirely different, while the exterior has all the charm of the original. The porch upon the front of the house is covered in part only, with a pleasing arrangement of roof combined with trellis beams on the front.

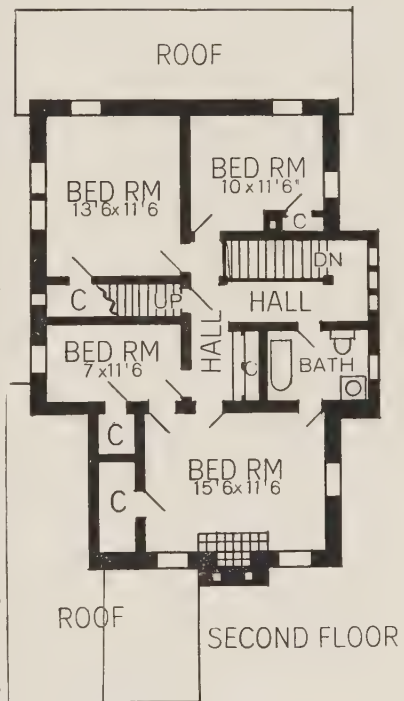
The house is built with hollow tile walls and cemented upon the exterior.

The hall in the center of this house is entered through a vestibule from the front and has a living room off of same across the front and the dining room at the rear, while

a den has been placed at the end of the hall. The stairs are arranged in such a manner that they may be closed off by means of a door, thereby eliminating the possibility of draughts. This feature is very desirable when an expensive heating plant cannot be afforded and is also at the same time a good point because of a saving in the cost of building an enclosed stairway over that of an open stairway. The pantry, dining room porch, kitchen stoop and toilet room are placed across the rear of the house. The second floor has four bedrooms, one of which is a child's room, and a bathroom and stairway leading to the attic. The whole plan



FIRST FLOOR



SECOND FLOOR

makes a very complete and attractive house and in small details can be varied to suit the purchaser.

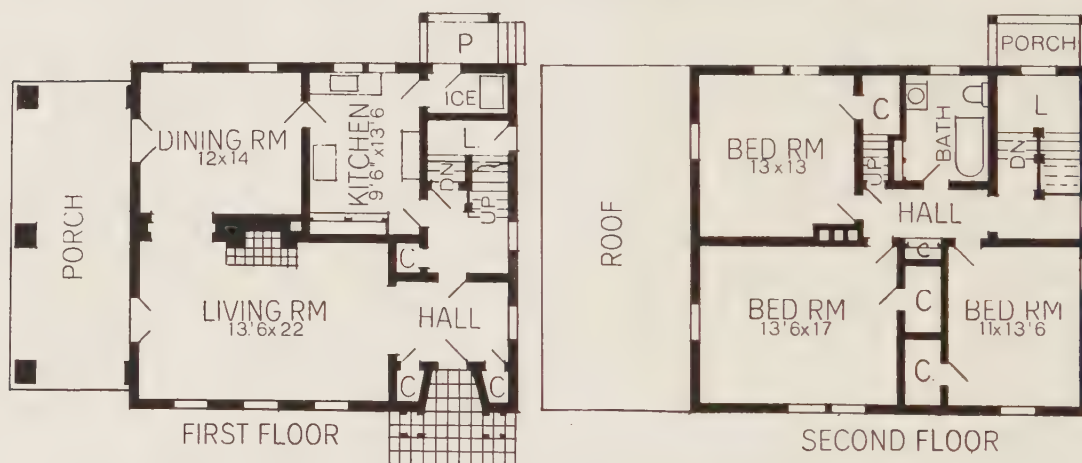
Cost \$6,000.00. Could be built in frame for about \$4,500.00. In tile the cost should not exceed \$6,500.00 under most unfavorable conditions.

No. 150—Size 28 x 44 feet. Price of Plans \$45.00. Price of Specifications \$5.00.



### AN OLD FASHIONED COLONIAL HOUSE

The lattice entrance porch, wide siding, tight barge and simplicity of treatment all combine to give this design an old fashioned New England Colonial effect. The siding and trim are painted white and the roof is in shingles stained green.



The interior is designed along modern lines with an entry hall and separate stair hall, thereby doing away with the necessity of a rear stairway with a consequent saving in floor space. The living room and dining room are separated by a cased opening with wide reveals, and fireplace, furnace and kitchen flues are all carried in one chimney, thereby further reducing the cost. The second floor contains three large bedrooms with closets and large bathroom. Additional rooms can be placed in the attic, if desired. The large porch at the side connected with living room and dining room by long French doors is a most attractive feature.

The exterior could be developed in a number of other types, which we will be glad to suggest on request.

This design can be built under ordinary conditions for about \$4,000.00.

No. 206—Size 32 x 28 feet. Price of Plans \$35.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.

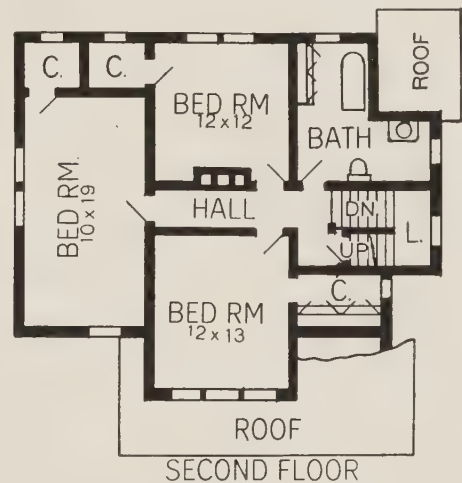
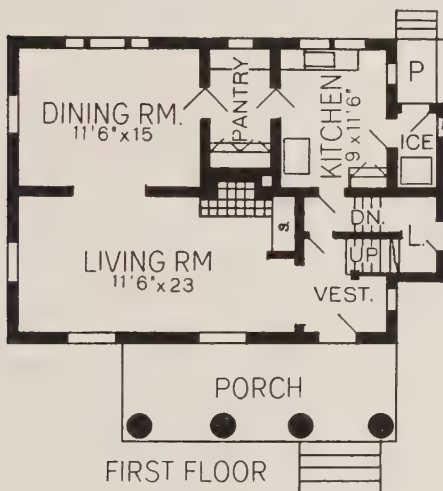




### A TWO-STORY BUNGALOW

Wide siding and shingles are combined on the exterior of this house and the roof can be in shingles or slate, as desired.

The long living room across the front with ingle-nook seat and fireplace in the corner make an attractive feature; the dining room, pantry and kitchen all being on the rear.



Three bedrooms and large bath occupy the second floor and each room is provided with a large closet. Additional rooms can be provided in the attic, if desired.

The basement extends under entire house and hot air furnace and complete plumbing equipment is provided.

This is an inexpensive house to build, on account of the compact plan and the fact that considerable room is gained on the second floor by extending the front bedroom over the porch, and should be built in most localities for about \$3,000.00.

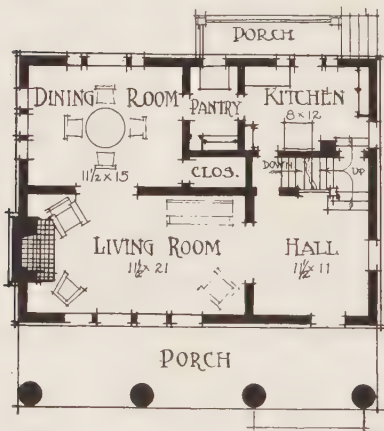
No. 152—Size 35 x 24 feet. Price of Plans \$25.00. Price of Specifications \$5.00.



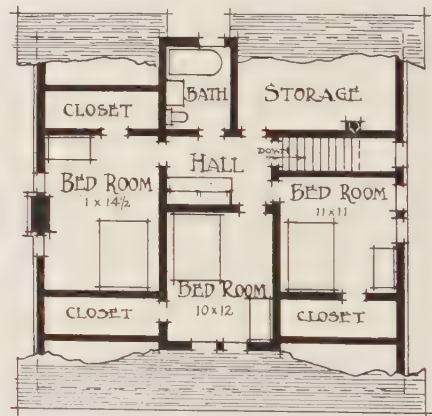
### A THATCHED ROOF COTTAGE

This Irish cottage with stained shingle roof, rounded eaves, giving a thatched effect, and wide clapboards or shingles over ordinary balloon frame, recalls pleasant memories of the "ould country," and is eminently practical as an American home. The chimney is brick, or can be plastered if desired, and porch floor is cement, laid off in large squares.

Full details and instructions for building the rounded eaves are given in the working plans and specifications.



FIRST FLOOR



SECOND FLOOR

The ground floor arrangement is simple and convenient, with combination stairs and access to basement from hall and kitchen. The large closet off the dining room can open off the rear hall if desired. The basement is built under entire house. Three bedrooms, bathroom and large storage room on second floor complete the plan. An enlargement of this design is shown under Number 189.

Cost \$3,200.00. Can be built for from \$2,500.00 to \$4,000.00.

No. 103—Size 24 x 34 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.



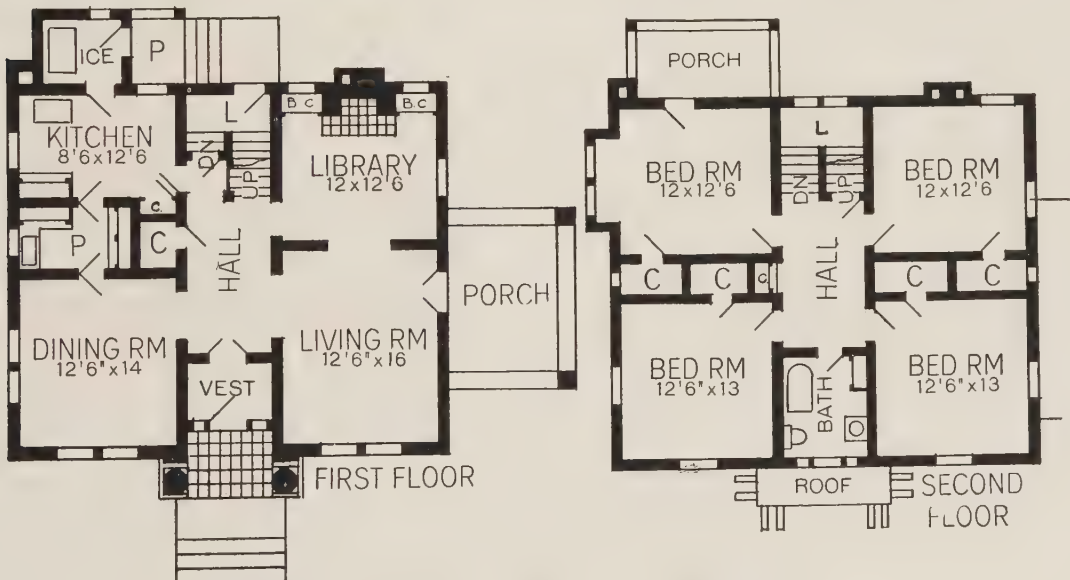


### A SHINGLED HOUSE

This exterior is covered with large shingles laid 10 inches to the weather and stained silver gray. The roof is in green shingles with every sixth course doubled. The recessed entry way and semi-enclosed side porch are attractive features.

The living room, library, dining room and kitchen all open into the center hall, where provision is also made for a large coat closet.

The second floor contains four bedrooms of practically the same size, each with large closet. The bathroom is located over the vestibule and contains a closet for towels, etc. The attic is finished in one room and basement extends under entire house.



This design should be built for from \$4,000.00 to \$4,500.00.

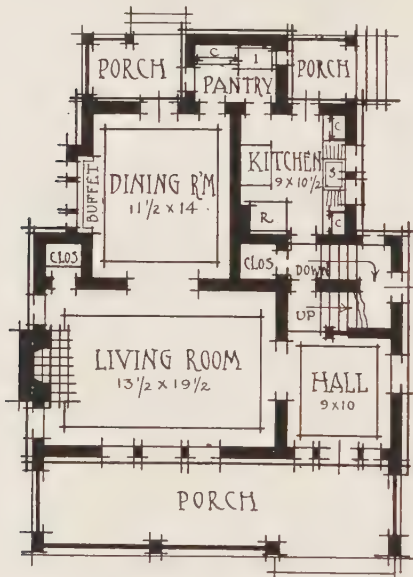
No. 190—Size 34 x 28 feet. Price of Plans \$35.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.

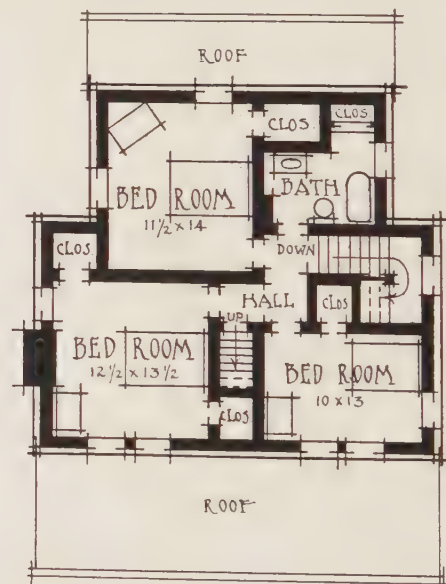


### A SEVEN-ROOM COTTAGE

A combination of shingled gables, resawn 10-inch siding and brick-work give this house an unusual and pleasing exterior. The large porch across the front is nicely tied to, and forms an integral part of, the design.



FIRST FLOOR



SECOND FLOOR

Symmetry is the keynote of the lower floor. By opening the hall directly on center with the fireplace, and the dining room on center of the living room, the apparent size of the interior is greatly increased. The interior of this house gives one the impression of being a very large and expensive residence. The service portion is very complete and convenient. Access from hall, kitchen or the outside to the basement is as convenient as anyone can wish for. The porch off the dining room, overlooking the garden,



and the pantry arrangement with outside icing, are only a few of the numerous points commendable in this plan. The second floor has three large bedrooms with ample closets, a spacious bathroom and stairs to attic. The roof at the rear of the second floor can be carried up higher and a balcony gained off of the rear bedroom, which feature will be included if requested when ordering plans. The attic is unfinished and the basement extends under the entire house. The attic is large enough to contain two bedrooms and storage space, if desired, or could be finished as one large room and used as a billiard room.

Cost \$3,300.00. Can be built for from \$3,000.00 to \$4,500.00.

No. 119—Size 30 x 28 feet. Price of Plans \$25.00. Price of Specifications \$5.00.



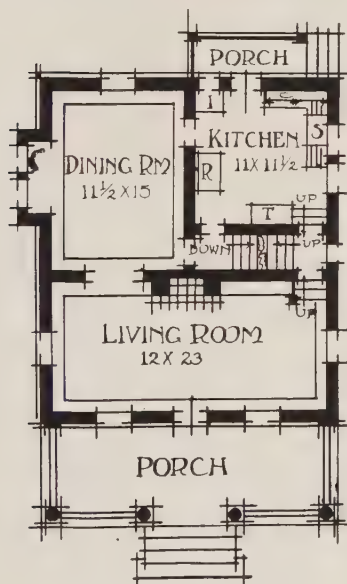
### A FIVE-ROOM COTTAGE

A design for a small home having a Colonial feeling and kept simple and inexpensive. Ordinary lap siding is used on the lower story; the roof and gable ends are shingled. The living room is entered direct and one chimney is provided which is used for the furnace, living room mantel and the kitchen range, a piece of 6-inch double-lined iron

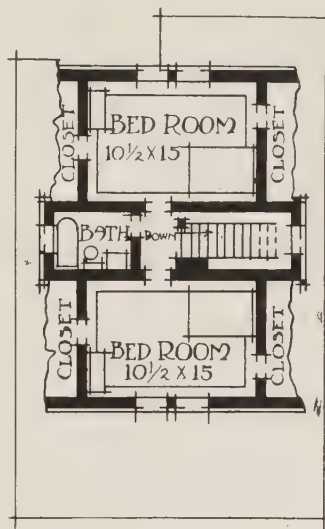
pipe being used to extend across rear stair hall to kitchen, and from there connected with the kitchen range. Two bedrooms are provided. Combination stairs lead from the kitchen and living room to the second floor and a stairway to the basement, which extends under the entire house. Bathroom and kitchen are carefully studied and conveniently arranged. A pantry could be added in the rear with small additional expense.

Cost \$2,200.00. Can be built for from \$2,000.00 to \$2,800.00.

No. 132—Size 24 x 28 feet. Price of Plans \$20.00. Price of Specifications \$5.00.



FIRST FLOOR

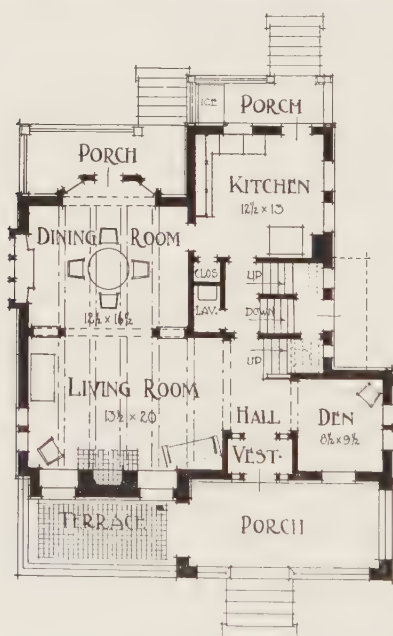


SECOND FLOOR



### AN ENGLISH HALF TIMBER HOUSE

An English brick and half timber house with character in every line. The uncovered porch and the exterior expression of chimney seats and fireplace with a picturesque grouping of exposed beams on plaster are typical of English half timber work. The uncovered front windows permit free access of light into living room.



FIRST FLOOR

The house is entered through a vestibule, and front and rear halls give access from kitchen to front door. Living room and dining room have beamed ceilings, and a large fireplace in the front of the house gives a cheerful air to both rooms. The dining room opens onto a porch by means of a French window in the bay, which overlooks the garden. The kitchen has ample cupboard space and the refrigerator is placed on an enclosed rear porch. The den may be omitted, considerably reducing the cost as well as the width



SECOND FLOOR



of the house. The second floor is reached by combination stairs and contains four large bedrooms, the main bedroom having two closets and a fireplace. One of the closets contains a lavatory. Each of the other bedrooms has large closets. The bathroom is off of the hall, upon which also open the linen closet and stairs to the attic, which is finished in one large ballroom. A down stairs water closet is provided under the stairway on the grade level by the side entrance. Basement under entire house.

Cost \$6,500.00. Can be built for from \$6,000.00 to \$7,500.00, depending on local building conditions.

No. 109—Size 32 x 36 feet. Price of Plans \$40.00. Price of Specifications \$7.50.



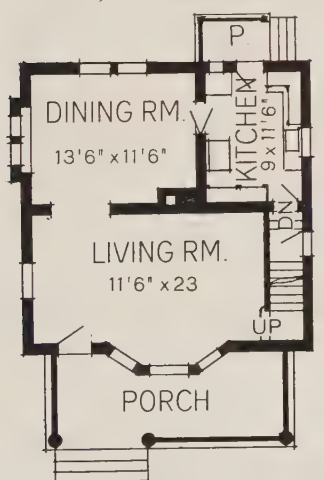
### AN INEXPENSIVE HOUSE

This is the original design from which our Nos. 164, 165, 167 and 169 were developed. Each of those designs being a variation or elaboration of this design. Considering the total floor space and the complete equipment of this house it is the cheapest design to build, that we have. Everything is designed for economy in construction and "stock"

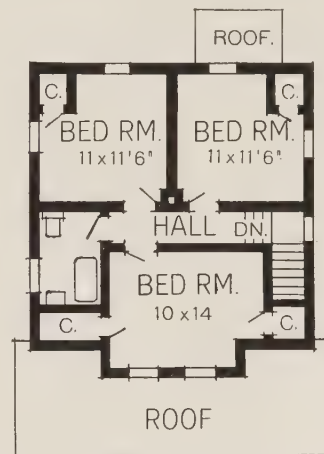
sizes and designs are used throughout. By careful arrangement and selection of these materials a very attractive house is obtained.

The first floor contains living room, dining room and kitchen, and the second floor three bedrooms, each with closet, and bath. Basement under entire house. No attic.

This house cost \$1,600.00 as built, with complete plumbing and heating equipment. It should be duplicated anywhere for the same amount and for less outside the larger cities.



FIRST FLOOR



SECOND FLOOR

No. 223—Size 24 x 24 feet. Price of Plans \$10.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.

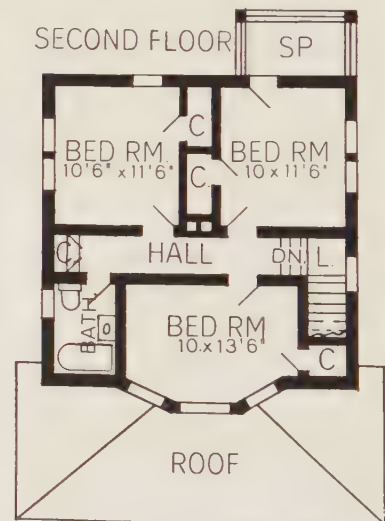
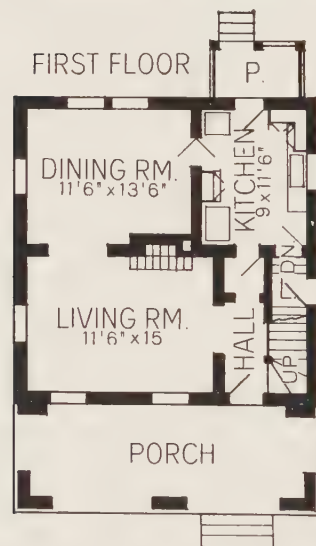


A HIP ROOF HOUSE

In this design porch posts or columns have been done away with and the roof of the porch is supported by means of lattice work, which is also carried out in the porch railings. The effect is very striking and of extraordinary good taste. The first floor up to the second floor windows is covered with ordinary lap siding and the band under the

eaves down to the sill of the second floor windows is covered with shingles stained gray. The roofs are covered with slate. The foundation is of rock face stone.

The dining room and living room open up nicely with the fireplace arranged so that a single chimney answers for both the kitchen and living room fireplace. The first floor is finished in hardwood, except the kitchen, which is pine. The basement occupies the entire area of the floor plans. The front bedrooms are finished in



enamel and the two rear bedrooms are finished in pine stained. The sleeping porch is over the rear kitchen porch.

A variation of this plan in which the hall and living room are thrown into one room, and various other minor changes made is shown under design No. 182.

This design cost about \$2,100.00 as built, and should not cost to exceed \$2,500.00 under most expensive conditions.

No. 164—Size 24 x 24 feet. Price of Plans \$20.00. Price of Specifications \$5.00.





### A BROWN SHINGLE HOUSE

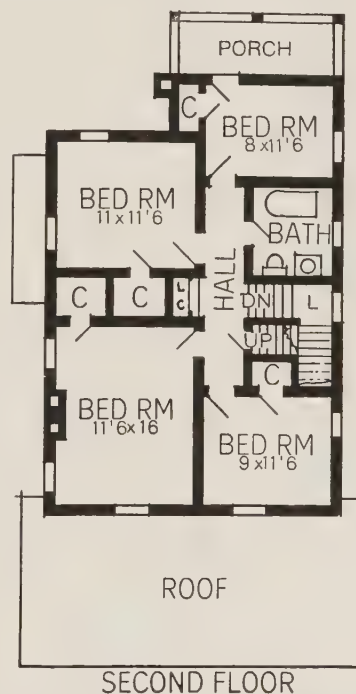
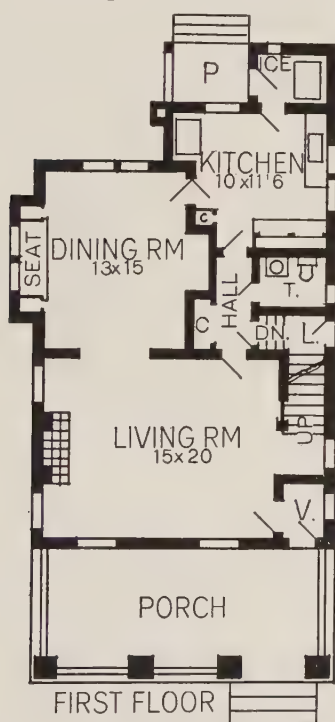
Large shingles laid 10 inches to the weather and stained a rich brown, together with brown trim and white columns are the features of this exterior.

The plan is very compact with large living room, dining room with built-in seat and china cupboards, and recess for buffet. A toilet room off of rear hall is also a desirable

feature. The kitchen is well arranged with ample cupboard space, sink with double end drain boards, recess for range, and convenient broom closet. The refrigerator is in separate cold room, which also forms a vestibule entry to kitchen.

One of the four bedrooms is very large for a house of this size and the others are well planned to provide spaces for beds and other furniture. The attic is finished in one large room. Basement under entire house.

This house should be duplicated for from \$3,500.00 to \$4,000.

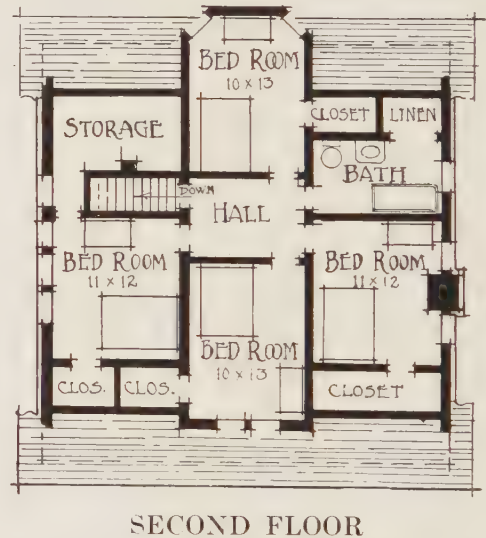
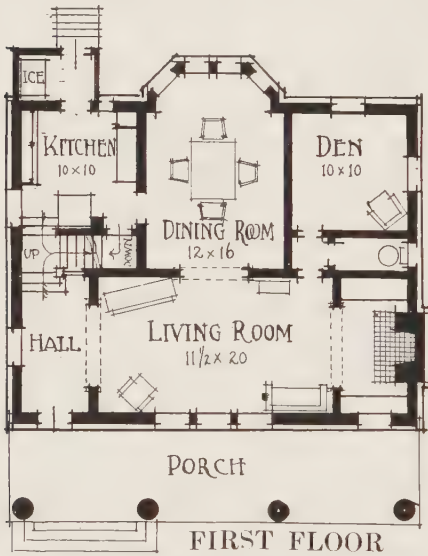


No. 179—Size 24 x 40 feet. Price of Plans \$30.00. Price of Specifications \$5.00.



### A DUTCH COLONIAL COTTAGE

This Dutch Colonial Type of Residence constructed in frame, with gambrel roof is very picturesque and homelike. The chimney is built of rough stone and red brick, laid in a pleasing combination which harmonizes well with the texture of the shingles. The heavy porch columns which give this house so much character are built of wood. The photographs show two developments of the exterior.



The general plan is very similar to No. 106 except that this house has no attic, storage space being provided in a large room on the second floor. Several minor changes, such as opening up the den and living room or enlarging the den by doing away with the toilet, can be made without increasing the cost. The kitchen stairs and entrance hall arrangement are the same as described in No. 106.

A photograph showing a pergola entrance to the dining room which adds to the attractiveness of the rear view of this house is shown on page 235.

Cost \$3,500.00. Can be built for from \$3,000.00 to \$4,200.00.

No. 118—Size 34 x 27 feet. Price of Plans \$25.00. Price of Specifications \$5.00.



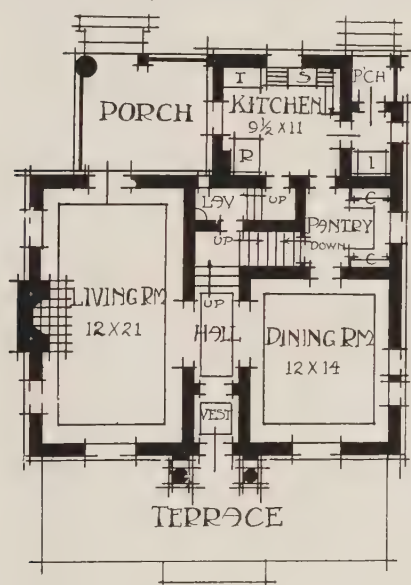


### AN OLD COLONIAL HOUSE

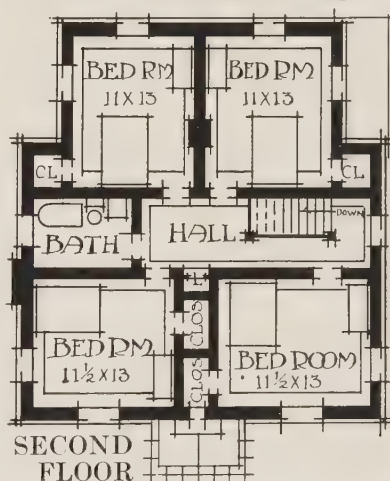
A type of Old Colonial farm house made more stately by placing a broad, paved terrace in front of the house and somewhat modernized by the use of a trellis beamed hood over the entrance and a flower box placed underneath the center window on the second story. It is built entirely of frame with wide clapboards and shingle roof.

The walls have a cream-white color and the sash and other trim are painted pure white. The roof is colored moss-green and the blinds are painted a dark bottle-green. It has the air of an old New England farm house and reminds one of the days of our grandfathers. This is a true American type of architecture and with the proper setting has no equal for a restful home-like home.

The plan is the usual Colonial type with a center hall and large living room on one side and dining room on the other. The arrangement of rooms on both floors is economical and no space is wasted. As this type of house does



FIRST FLOOR



SECOND FLOOR

not permit a covered porch, one has been provided at the back, overlooking a handsome garden. Placed thus it is more desirable than one overlooking a street.

Plans of numerous small cottages of the Colonial type, which have been kept as pure in design as this, up to mansions costing five times as much are kept in stock, which we will be pleased to submit upon application.

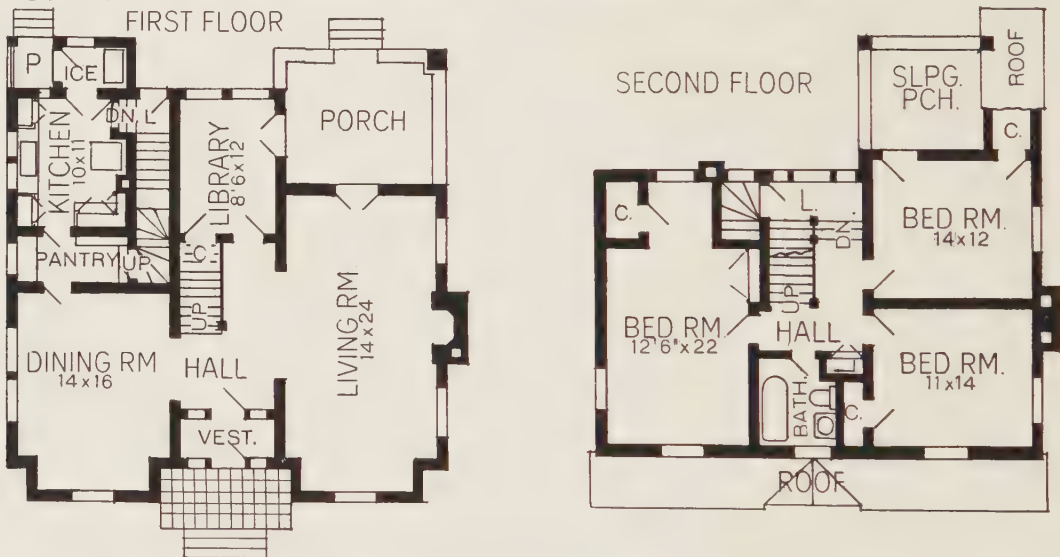
This design should be built under average conditions for about \$4,000.00, or in localities where material and labor are cheap for \$3,700.00. In the larger cities the cost would probably run to \$4,500.00.

No. 131—Size 30 x 32 feet. Price of Plans \$30.00. Price of Specifications \$5.00.



### A QUAIN OLD FASHIONED HOUSE

A good example of a simple Colonial design carried out in a quaint and pleasing manner. The idea of simplicity and quaintness has been maintained in the extra wide shingles used upon the exterior and the division in the window sash, also by the exceedingly large and simple outside chimney. The roof is in green shingles.



The floor plan is carried out in the center hall type, but a library has been located at the rear of the hall under the main stair landing and the second floor is reached by combination stairs from the hall and from the pantry. The grade landing to the cellar is arranged off the kitchen at the rear. A porch is provided at the rear of the living room and an entrance stoop shows only on the front. The second floor has three bedrooms with bath over the vestibule and a sleeping porch off of the rear bedroom. Basement under entire house.

The house is finished throughout with oak floor, hardwood finish in the main rooms and hall and white wood finish for enameling in all of the bedrooms and bath. The



kitchen and pantry are finished in Georgia pine. The attic is plastered and finished in pine.

With hot water heat, best grade plumbing and excellent material and workmanship throughout, this design can be built for from \$4,500.00 to \$5,500.00.

No. 177—Size 37 x 35 feet. Price of Plans \$45.00. Price of Specifications \$5.00.

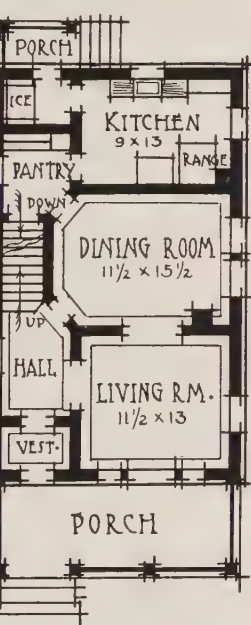


### A SMALL SIX-ROOM COTTAGE

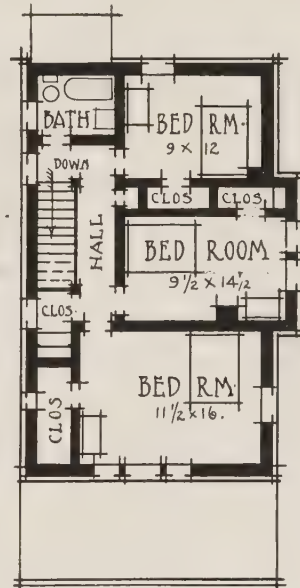
A simple treatment of a six-room house possessing its full share of character. This home is of frame construction with the first story in ordinary siding painted white and the second story in shingles stained gray. Porch columns and all trimmings are painted dark brown and the window sash and sash bars are painted white. The rail-

ing on the porch is made up of  $\frac{7}{8}$  by 5 in. cypress boards with the pattern sawed out at each joint. This is a departure from the ordinary spindle and is one of the details about this home which gives it style and character.

The plan is very simple and inexpensive, and at the same time possesses all of the features obtainable in such a small house as this. The kitchen, with its pantry and ice room, is complete and convenient, and the bathroom on the second floor is placed conveniently for general use from any part of the house. The plan is arranged with chimneys so that each room can be heated with a stove, and in cold weather the rooms can be shut off from each other to keep out draughts. The expense of a furnace would be a wise investment, and the additional cost would not be great.



FIRST FLOOR



SECOND FLOOR

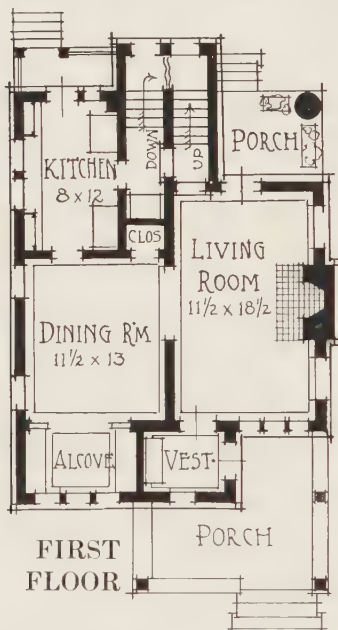
Cost \$2,100.00. Can be built for from \$1,900.00 to \$2,500.00.

No. 113—Size 20 x 34 feet. Price of Plans \$20.00. Price of Specifications \$5.00.

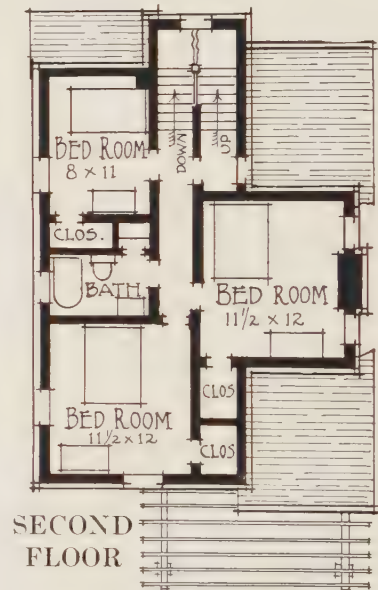


### A HOUSE FOR A NARROW LOT

This house is designed for a narrow city lot, and possesses a degree of character seldom obtained in a house so small as this. It is built of frame construction with walls of lap siding and roof of shingles.



The floor plan is compact without waste space. The living room has a mantel on its longest wall with a large opening in the opposite wall to the dining room. As in No. 105 it has a porch from the rear of the living room overlooking the garden, a similar stair arrangement to the basement and a refrigerator placed at the end of rear hall.



The kitchen is well lighted and complete in all its appointments with the sink directly under a window. The rear hall and closet off the dining room can be thrown into the kitchen if desired, increasing that room to  $11\frac{1}{2} \times 12$  feet. The alcove off the dining room, with a table and built-in seats, is very attractive and makes a cheerful breakfast room. The second floor contains three good-sized bedrooms, a bath, linen closet, ample clothes closets and stairs to attic. Basement under entire house. Another development of this plan is shown under No. 104-A.

Cost \$2,700.00. Can be built for \$1,500.00 to \$3,500.00.

No. 104—Size 24 x 32 feet. Price of Plans \$25.00. Price of Specifications \$5.00.



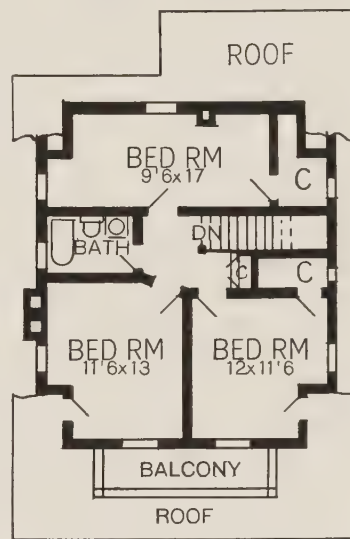
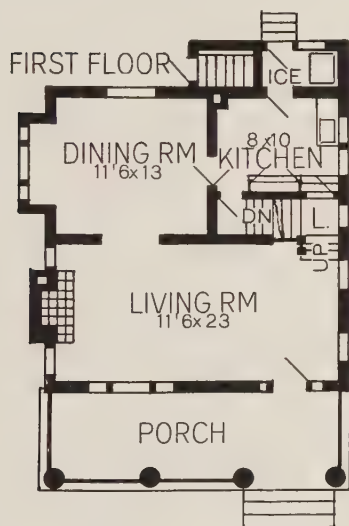


### VERTICAL BOARDS AND WIDE SIDING

This house is of the same plan as No. 149-A but has been slightly rearranged upon the second floor to give an opportunity for an entirely different but equally artistic exterior. Upon this exterior the second floor has been carried out in wide vertical boards with batten strips at the joints, while the first floor is again covered with the

wide resawn lap siding. The color scheme is to have the entire body of the house below the vertical boards in white, while the vertical boards are stained brown and waxed and the roof is in grey shingles.

The first floor of this house is covered by description of No. 149-A, while the second floor is equally interesting, and, if anything, arranged to better advantage than in 149-A. The closets are placed under the slope of the roof and the bathroom is placed over the dining room. The arrangement is good and the



slight excess in cost of plumbing by reason of the bathroom being placed over the dining room is justified in the general scheme of the second floor. A vestibule can be added as shown on plan of No. 149A if desired. The basement extends under the entire house and is reached by stairs from kitchen and outside cellarway.

The cost of this house should be about the same as 149-A; from \$2,000.00 to \$2,500.00.

No. 149-B—Size 24 x 24 feet. Price of Plans \$20.00. Price of Specifications \$5.00.



A SHINGLE SEASHORE COTTAGE

This house, which is built upon the seashore and is particularly planned for such a location, is nevertheless one that would make an artistic and comfortable home, both from the exterior attractiveness and the arrangement of plan, in any other location. The side walls, porch columns and roofs are covered with shingles all stained a moss green in color, while the windows and other openings are picked out in cream white, and the chimney is built of red brick. The gables are rounded so that the shingles give the appearance of a thatch roof, a feature greatly resembling the English thatch roof cottages, one that is not expensive and at the same time presents a homelike and artistic effect.

The floor plans are in a sense "L" shape with the porch surrounding three sides of the living room, which is provided with many large windows to the end that the living room will be well lighted and ventilated. The dining room adjoins the living room and opens in turn to a dining porch, which is suggested, on the plan, as being screened in. The stairs to the second floor start from the hall at the rear of the living room and are accessible from the porch as well, and land in a small second floor hall off of which are grouped three bedrooms and a bath. The main bedroom has a sleeping porch opening off of it, and the rear bedroom also has a small balcony, both of which are very desirable.

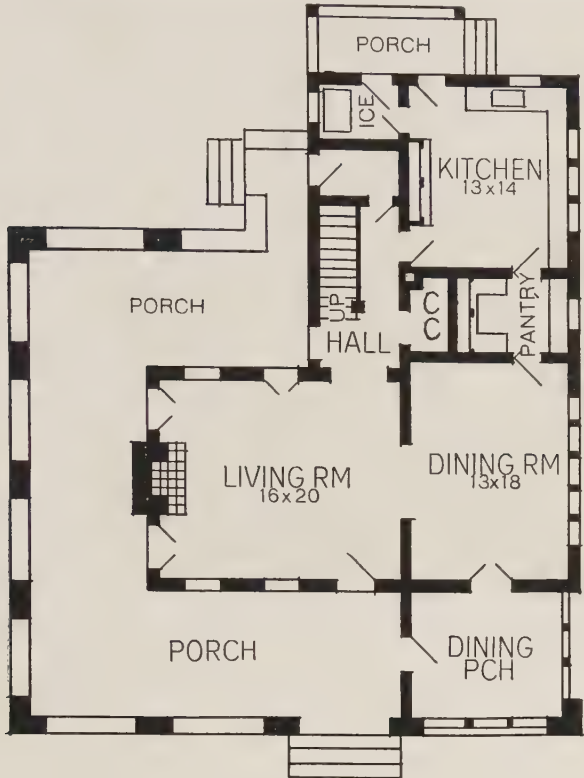
The kind and style of interior finish and doors will be specified to suit the individual selections of the purchaser as also other features that have to do with individual taste. As built this house has no cellar and is placed upon masonry piers and wood sills. A cellar and a complete foundation and a heating plant, however, can be arranged for.

The cost of this house will vary of course, with the type of construction. As a summer cottage it could be built for about \$3,000.00. With basement, heating plant and equipment for a cold climate it would cost from \$3,500.00 to \$4,500.00.

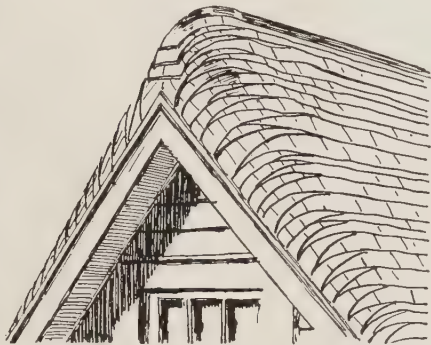
The method of laying shingles to produce the thatched roof effect is shown on the following page.

No. 151—Size 34 x 40. Price of Plans \$35.00. Price of Specifications \$5.00.

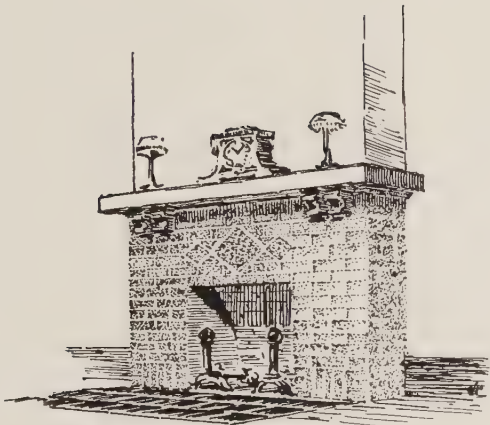




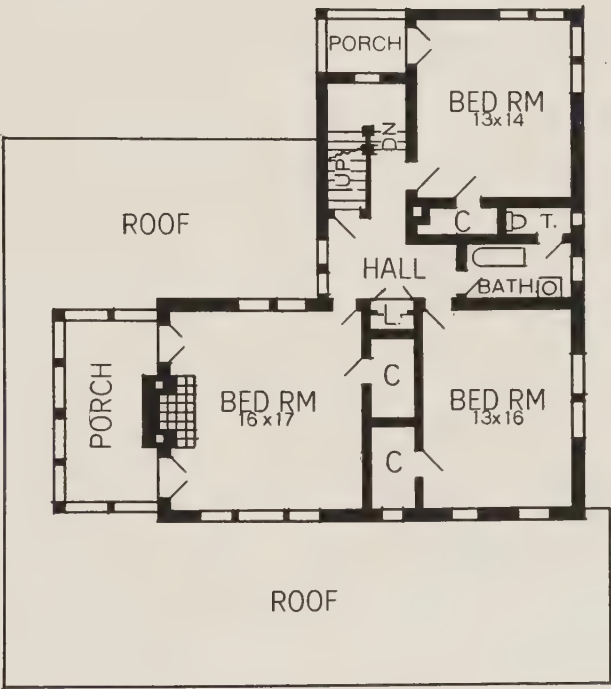
FIRST FLOOR  
No. 151.



Detail showing method of laying shingles  
for thatched roof effect



Mantel in No. 151



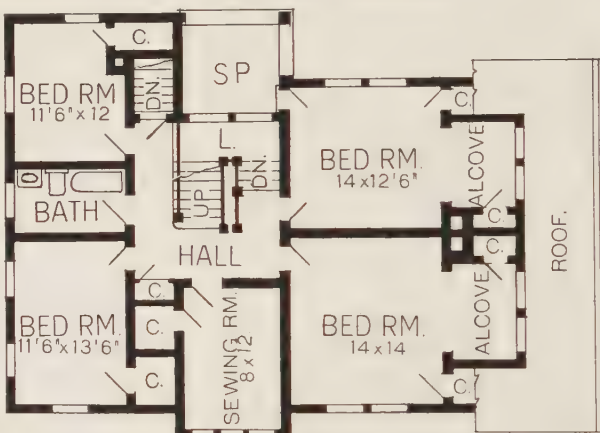
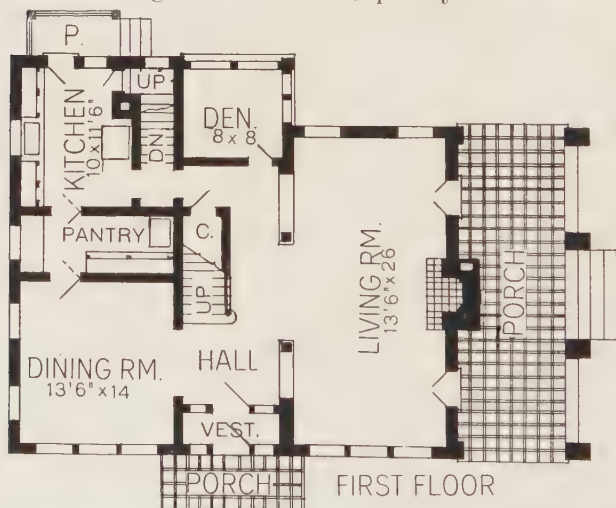
SECOND FLOOR  
No. 151.



AN ENGLISH BRICK AND HALF TIMBER HOUSE

This house, though not large nor expensive, has the appearance of being much larger than it is, on account of the long sloping roof over the side porch. The first story is in a rather dark colored red brick, while the half timber work is stained brown and the plaster tinted a cream color. The roof is in red slate or would be equally attractive in tile or green shingles.

The large living room is on the right of the hall and separated from it by a wide archway with columns and bookcases beneath. The den is at the rear of the hall underneath the stair landing. The kitchen, pantry



SECOND FLOOR

and dining room are placed at the left of the hall, and the entire interior is carried out in the same style of architecture as the exterior. The second floor is reached by a wide open stairway from the main hall and a separate rear stairway from the kitchen. On this floor are four large bedrooms, with ample closets, sewing room, bathroom and sleeping porch. The attic is finished in two rooms and is reached by stairs from the second floor hall.

This home will interest anyone desiring the best in architectural expression. A more complete description will be gladly given upon application.



The cost of a house of this type will depend on the quality of materials used and the elaboration of detail. Using "stock" material throughout it should be built for \$5,000.00, but this cost could be increased two or three thousand dollars, and every dollar of this increase would show in the attractiveness of the home.

No. 194— Size 38 x 38 feet. Price of Plans and Specifications \$65.00.



### SHINGLES AND WIDE CLAPBOARDS

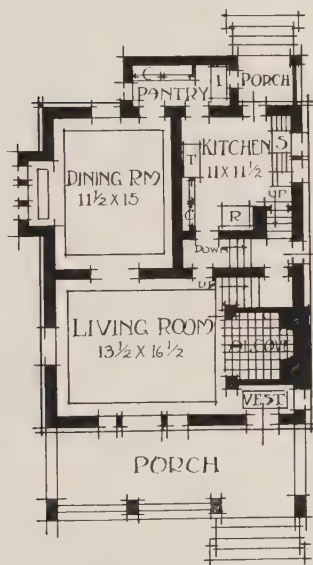
This small house of frame construction is carried out in shingles from above the first story windows. The chimney, porch, walls and foundation are rough red brick; the space between the top of the first floor windows and foundation is sided with 10-inch strip lap siding. It is a splendid example of artistic effect obtained with inexpensive

material. The plan is square and compact while the unbroken roof lines take away the usual high shouldered effect of a square house.

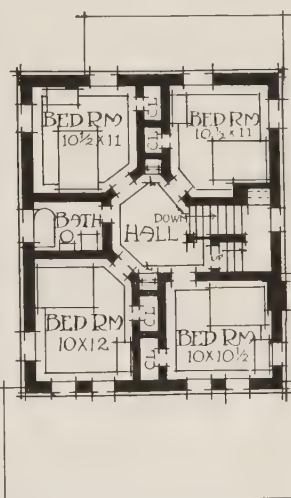
The fire-place and alcove at the end of the living room and between the vestibule and stairway are handsome features of the lower floor and give just the required effect to lift the plan from the common-place. The four bedrooms are large and plenty of closet space is provided. Upon close study, the completeness of this plan in all its details will be readily seen.

A variation of this design is shown under design No. 144, with an entirely different exterior and slight modifications in the floor plan.

Cost \$3,100.00. Can be built for \$2,900.00 to \$3,500.00.



FIRST FLOOR



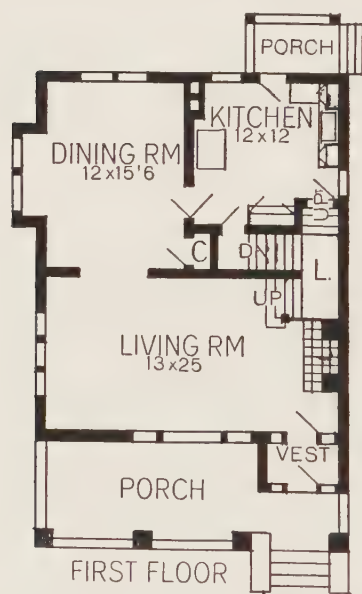
SECOND FLOOR

No. 130—Size 24 x 30 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

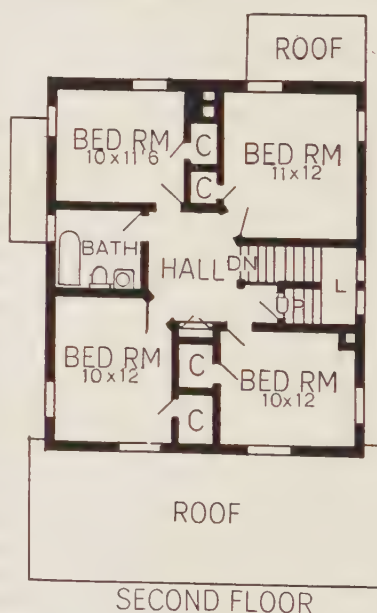


A VARIATION OF OUR No. 130

Showing the possibility of adapting varied exteriors to a given plan, as a comparison with No. 130 will show. The ingle-nook feature of our No. 130 has been eliminated and a vestibule projected out on the porch, a feature which is carried out by a great many home builders because of the effect of added length to the living



room. The exterior is covered with ordinary lap siding and the gables finished in half timber work with plaster panels on Bourget Sheathing. The roof is in black slate. This plan is very compact and considering the number of bedrooms and their size, together with the features of a combination stairway, grade landing and recess for a buffet, this is an inexpensive house, as a large family can be here-in easily accommodated. The attic is finished with two bedrooms in addition to the four on the second floor, while the basement is provided



with a laundry room, fruit closets, coal room, dry room and furnace room.

The living room and dining room are finished in oak, the kitchen in yellow pine and the second floor in white enamel with birch doors. The floors are of oak throughout.

Cost \$3,500.00 as shown; could be built for \$3,000.00 under favorable conditions, but could be made to cost \$4,000.00 with expensive finish and equipment.

No. 144—Size 26 x 30 feet. Price of Plans \$30.00. Price of Specifications \$5.00.





### A LARGE INEXPENSIVE HOUSE

The exterior of this design is covered with large shingles stained white or light gray and the roof is in ordinary shingles, every fourth course being doubled to add variety to the roof.

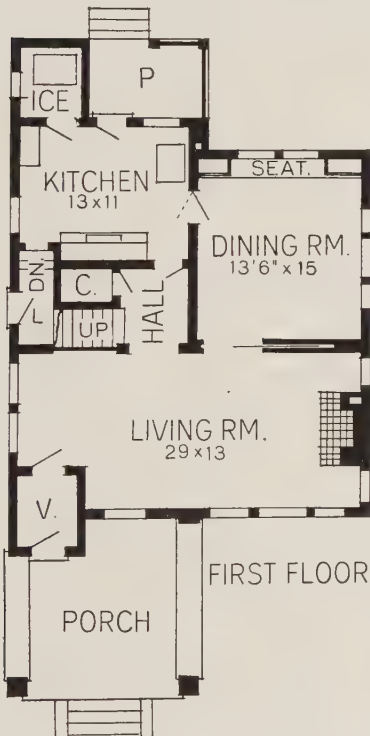
The living room extends across the front of the house and is entered through a small

vestibule. The dining room has a seat and built-in china closets at one end and the kitchen is well equipped with cupboards and other conveniences. The stairway to second floor is so located that no rear stair is necessary and a large coat closet is provided off of the stair hall. The second floor contains four bedrooms, each with a large closet, bathroom and sleeping porch.

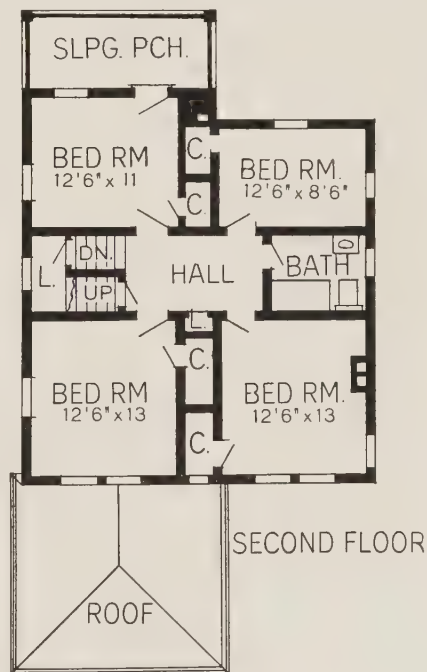
This design, being practically square, is inexpensive to build, considering the amount of floor

space. It should be built under ordinary conditions for about \$4,000.00.

No. 220—Size  $29\frac{1}{2} \times 30$  feet. Price of Plans \$35.00. Price of Specifications \$5.00.



FIRST FLOOR

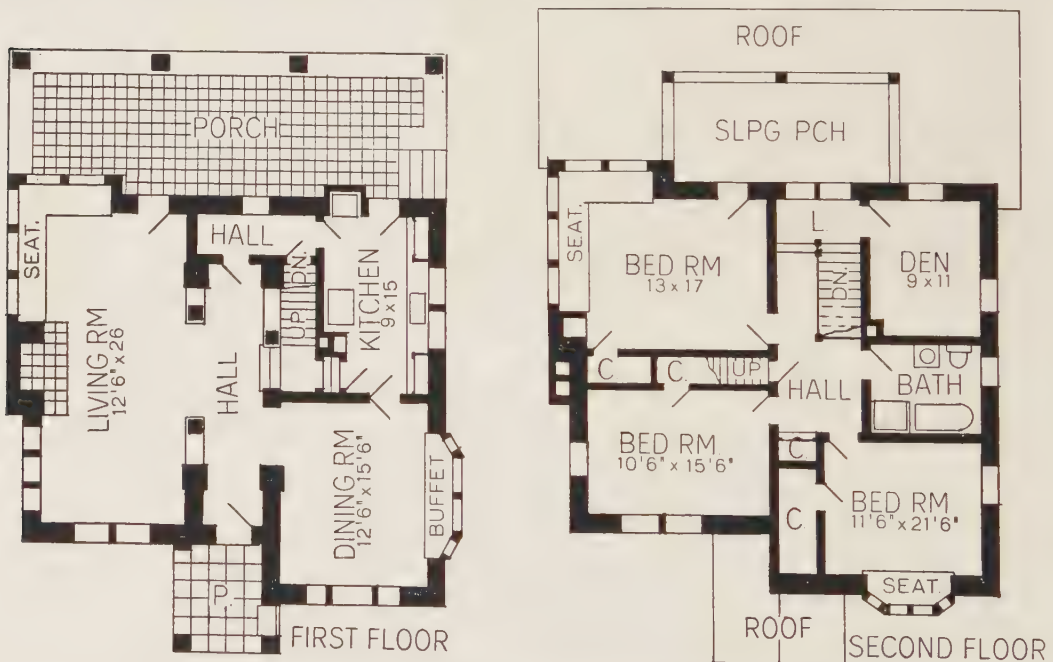


SECOND FLOOR



### A MODERN ENGLISH HOME

This design, carried out in brick and frame, after the style of the modern English architects, is one that affords the utmost sunlight upon the interior. The brick is a red velvet brick with a raked out joint and the large gable upon the front is cement plastered, colored a very light cream color, as also the plaster in the panels on the side bays and gables. The flat bay upon the front, which is in reality recessed from the wall line, and the oriel window over the dining room group of windows as well as the spindled porch are features highly commendable and coupled with the twin gable on the side makes this home one that has exceedingly good architectural expression.





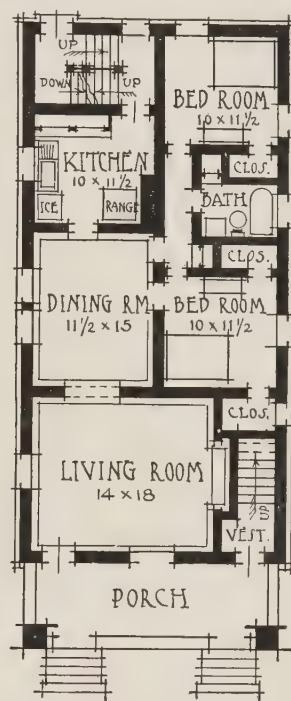
The living room and hall are designed to be finished in the same wood and color and are separated by wood posts with bookcases between the posts and the jambs of the opening. The fireplace at the side of the living room is on axis with this bookcase feature and also on axis with the stairs to the second floor, a feature giving symmetry seldom gained and always sought for in planning the better class of house. The seat on the side and rear of the living room forms the completion of the mantel design in a way which is novel and artistic. A rear hall gives access from the kitchen to the front door and the dining room has a built-in buffet. The entrance stoop has a tiled floor, as also the porch across the rear. This feature of the rear porch has been carried out because of the landscape work in gardens at the rear of the house, it being far more desirable to overlook a quiet, peaceful and well planned garden than a vista afforded by a noisy and dusty street. The second floor has three bedrooms, each with closets, and a den off of the stair landing. The bathroom is over the kitchen and a sleeping porch is provided on the rear off of the main bedroom. The attic is finished with a servants' room and a large room. The space to properly describe this house is lacking but complete information will be gladly given to anyone interested.

It is difficult to make an average estimate of the cost of a house of this character, as this cost will depend, to a great extent, on the elaboration of detail, as well as the grade of materials and workmanship used. It should be built for about \$6,000.00, with a good grade of material throughout.

No. 209—Size 34 x 33 feet. Price of Plans \$70.00. Price of Specifications \$5.00.



A TWO-FAMILY HOUSE

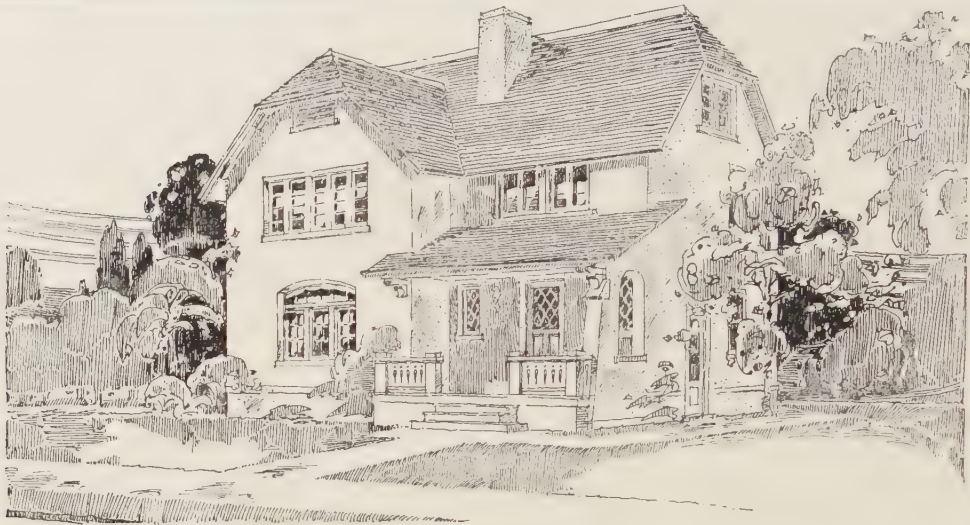


This is a very desirable plan of an inexpensive house for two families, and makes an attractive renting proposition. It is more economical to build and does not require so large a lot as the usual side by side double house. The second floor is the same as the first except that living room is entered through small hall at the head of the stairs. This hall occupies the same space as front closet on the lower floor. The living room on the first floor is entered direct from the porch. Each floor has a separate heating plant.

The exterior is simple and inexpensive.

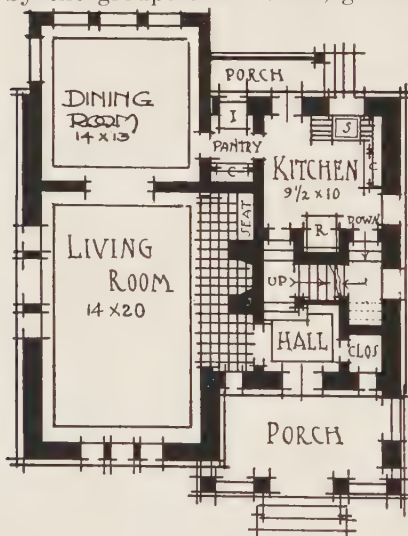
Cost \$4,000.00. Can be built for from \$3,800.00 to \$4,800.00.

No. 126—Size 24 x 47 feet. Price of Plans and Specifications \$25.00.



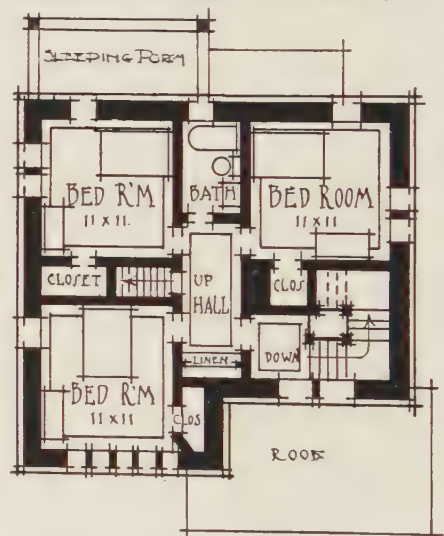
### MODERN ENGLISH

This type of modern English cement house is sufficiently localized to be called American and is a most excellent illustration of the beauty of this material for exterior wall surfaces. The roof lines and the rather broad expanse of plaster surface, broken by the groups of windows, give an artistic effect that would be hard to attain by the



FIRST FLOOR

use of any other material. The durability of the best brands of cement and the absolute water proofing mixtures upon the market have made the use of cement on hollow tile or brick desirable material, both from a practical and an artistic viewpoint. For that reason we have shown many of our designs in cement.



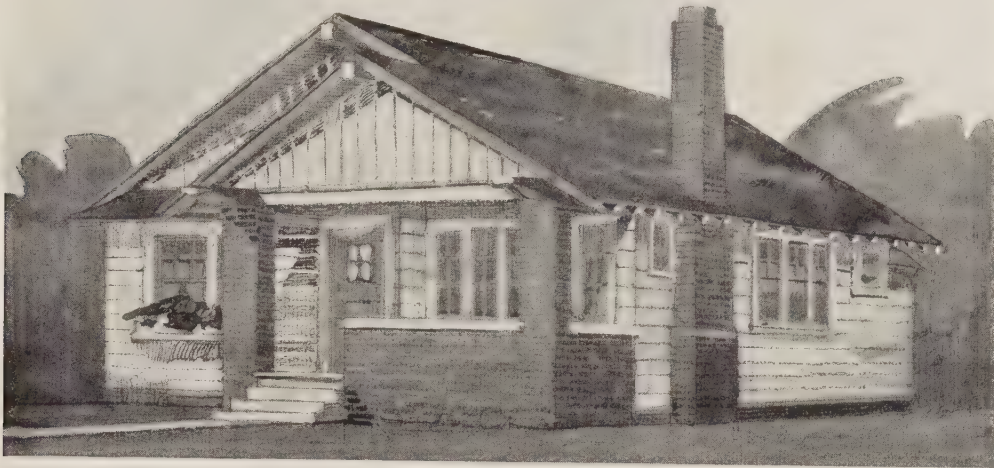
SECOND FLOOR

The large living room with the dining room at one end and a broad ingle-nook at the side, is the dominant feature of this home. The hall, kitchen and pantry are conveniently arranged. Each bedroom has a large closet and off of the hall is located a large linen closet, and at the further end of the hall a bathroom. Two bedrooms can be provided in the attic with sufficient storage space remaining. Basement extends under the entire house. A sleeping porch can be built over the dining room if desired.

Cost \$4,000.00. Can be built for from \$3,400.00 to \$5,000.00. The low figure being for frame construction, while the high figure should cover hollow tile construction with best grade of material and construction throughout.

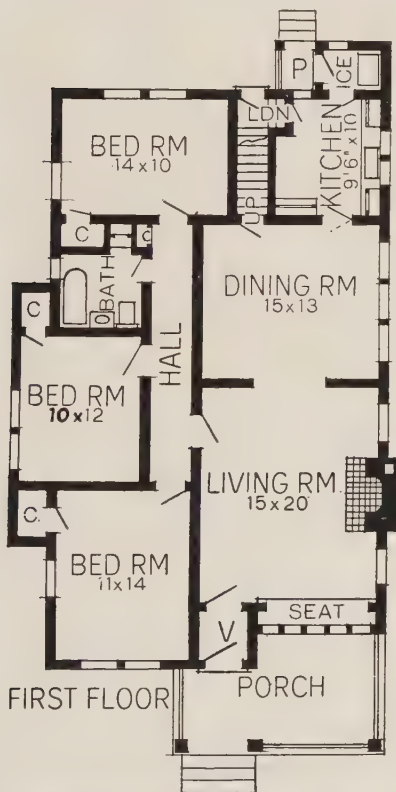
No. 123—Size 29 x 27 feet. Price of Plans \$30.00. Price of Specifications \$5.00.





### A SIX-ROOM BUNGALOW

In this design the main roof is brought out over the porch with a gable and a certain unity in architectural effect is produced. The gables as they slope to the ridge project out from the body of the house, giving somewhat of a Swiss effect. The porch walls and columns, as also the chimney are carried out in red brick, the body of the house in wide siding and the gables in vertical boards, all combining to make the bungalow very pleasing in appearance.



In this plan the living quarters have been arranged to occupy one side of the house and the sleeping quarters the other with the entrance to the sleeping quarters off of the living room, a point much more desirable than having access to the sleeping quarters off of the dining room. The stairs to the attic space are reached off of the dining room, and the basement, which occupies the rear half of the plan, is reached from a grade landing stairs out of the rear of the kitchen. The plan may be finished as the purchaser desires, but unless otherwise requested, oak floors will be used throughout on the main floor, hardwood finish in the living room and dining room and pine finish in kitchen, bedrooms and bath. The basement has a cement floor and the attic is finished with a rough floor and intended for storage purposes only.

In the usual type of bungalow construction this design should be built for \$3,600.00.

No. 200—Size 30 x 48 feet. Price of Plans \$30.00.  
Price of Specifications \$5.00.

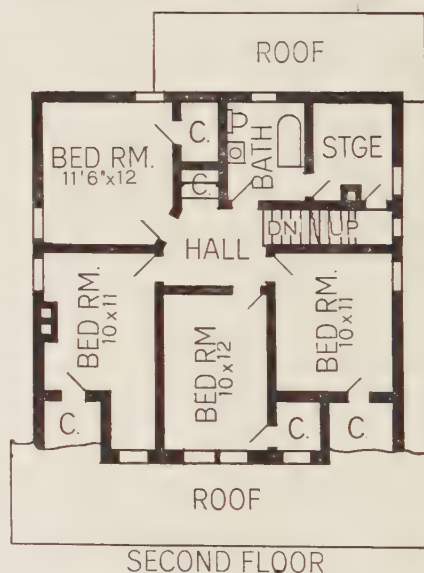
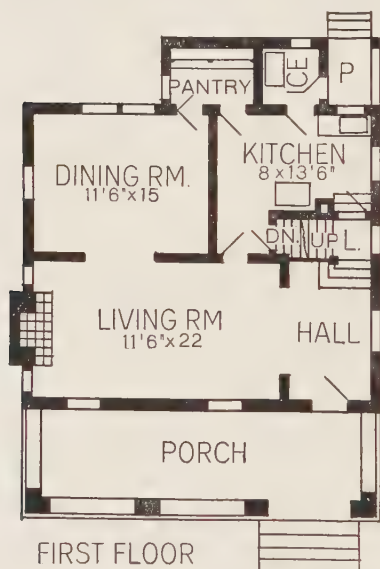


### A SHINGLE HOUSE

The walls, dormers, roof and porch posts are all carried out in shingles and the chimney is partially exposed upon the first floor and is of red shale brick. The body is stained green and the roof darker green, while the trimming is painted white. The second floor extends over the front porch thereby increasing the size of bedrooms, while

the foundation is no larger than is provided for an inexpensive small house.

The living room and hall take up the entire front. The dining room has windows to the rear and the kitchen has an ice room and pantry. Combination stairs lead to the second floor which has four bedrooms, small stair hall and bathroom.



Stairs from storage room give access to a small attic.

The interior can be finished to suit individual tastes. We would suggest oak, stained brown for living room and dining room, yellow pine for kitchen, with birch or poplar, enameled white, for the bed rooms.

The cost should not exceed \$3,000.00, and it would be possible to build this house for considerably less under favorable conditions.

No. 155—Size 30 x 24 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

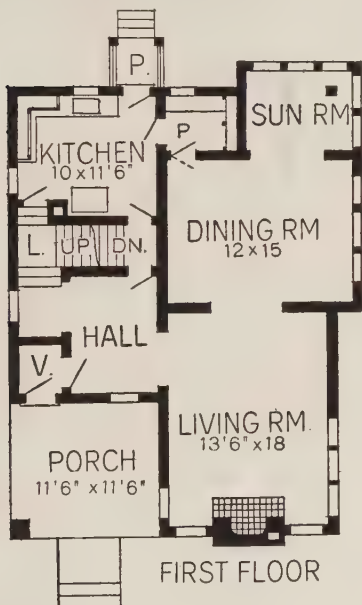




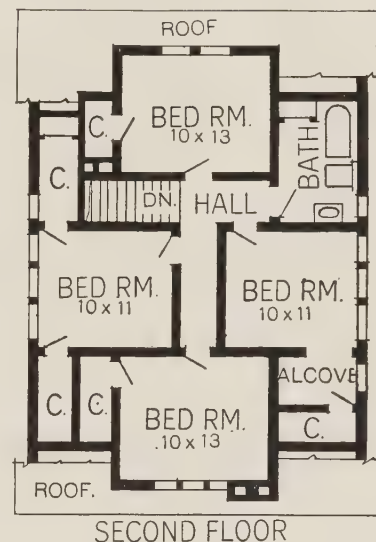
### A MODERN ENGLISH TYPE

The exterior of this design is somewhat similar to No. 105, which has been so popular. The exterior can be developed in siding, wide siding, or shingles, with shingle, slate or tile roof.

The plan is compact, with simple roof construction, therefore economical to build.



As shown the house is entered through a small vestibule, which can be omitted if desired. The living room, dining room and sun room are all connected by wide cased openings, and a butler's pantry connects the kitchen and dining room. Combination stairs lead to the second floor, which contains four bedrooms with large closets, and bathroom. No attic, but basement under the entire house. The sun



room at rear of dining room is an attractive feature and can be used as a den or library if desired or would make a very attractive little conservatory.

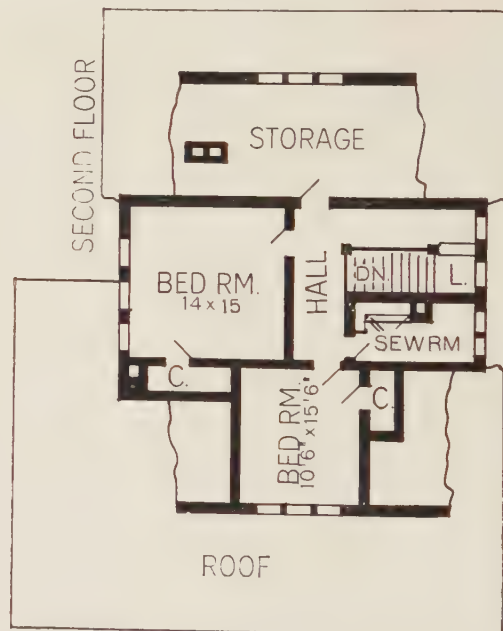
This house should be built for from \$2,500.00 to \$3,500.00, depending on kind and quality of materials used, and local conditions.

No. 212—Size 26 x 36 feet. Price of Plans \$25.00. Price of Specifications \$5.00.



A LARGE BUNGALOW

This bungalow, while having rooms upon the second floor with ample provision for ventilation to insure coolness in the summer time, is so designed as to have the low effect that is always associated with the bungalow. The foundation and porch piers are carried out in field or cobble stone. The roof is of shingles and the sides of the



house are carried out in wide resawn siding. The gables and dormers are also covered with shingles.

The living room is entered directly from the porch, which surrounds both sides of the house, and the dining room opens to the right of the living room. The bedrooms are reached by a hall off of the living room and at the end of this hall is provided



the bath. The kitchen is separated by a small pantry from the dining room and has an ample kitchen porch. The stairway extends from the hall to the second floor where two good bedrooms are provided, each with closets and an ample storage space on the rear. The feature of access to the bathroom from the bedrooms without passing through the living room is very desirable and insures utmost privacy of the sleeping quarters and at the same time affords proper access to same from the living quarters of the house.

This design is planned without basement and built in this manner should not cost to exceed \$3,100.00. With basement and heating plant it would cost about \$1,000.00 more.

No. 147—Size 32 x 44 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

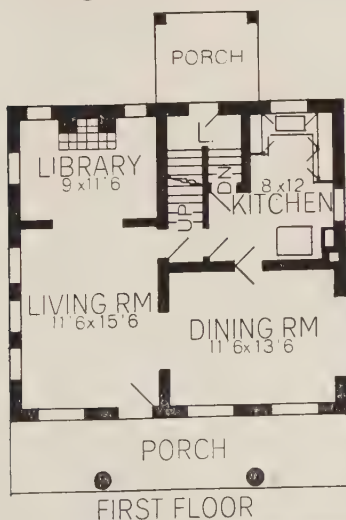


### A SMALL COLONIAL HOUSE

In this design the walls are shingled with extra large shingles which have been treated with a special white coating, thereby accenting the old fashioned Colonial effect. The roof is shingled and stained green, while the trimmings are painted white; a very artistic and home-like home.

The floor plans call for a full basement, two stories and attic house, while the living room, library and dining room are finished in hardwood with hardwood floors. One bedroom is white enamel. The kitchen and the remainder of the house is finished in pine

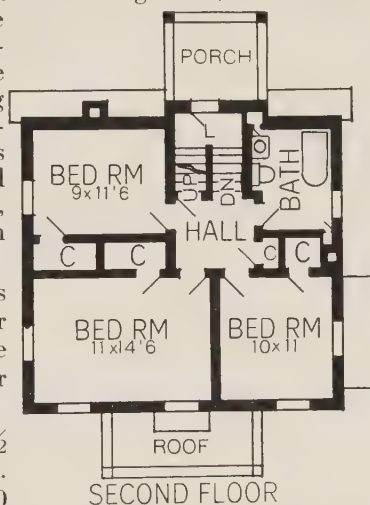
stained. On the first floor arrangement the library with a fireplace is very unique and desirable. The dining room opening off the living room has provision for a buffet alcove, which adds materially to the available floor space. The kitchen has a grade landing stairway and has convenient access, together with the living room, to the stairs



to the second floor. The second floor has three bedrooms, and a bath over the kitchen and also a sleeping porch off of the stair landing. The attic stairs ascend from the second floor hall to the attic, which is in one large room and not finished.

This house was built, as shown, for a little under \$2,500.00, and should be built in any locality for that amount.

No. 186—Size 26 x 25½ feet. Price of Plans \$20.00. Price of Specifications \$5.00





### A STORY AND A HALF BUNGALOW

In this design the effect of a bungalow is kept, and the long and low effect of the house is made possible by carrying the roof over the porch and projecting a double dormer on the front forming alcoves to the bedrooms.

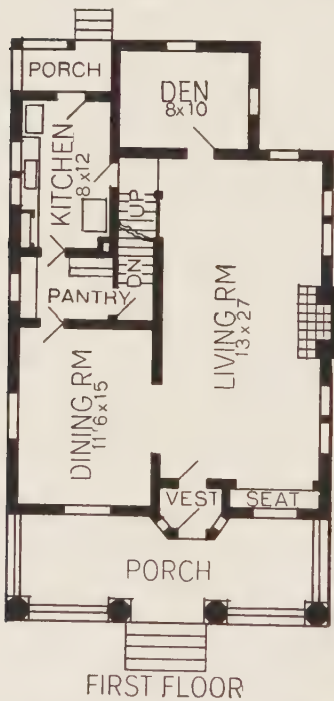
The living room is entered through a vestibule and a den is placed at the rear of this

room. The advantages of an extra, small room on the first floor are many. The one item of lighting will in time pay for its cost. The general tendency of late years has been to divide the first floor into living room, dining room and kitchen, but where it is possible to add a small room without undue increase in cost we believe that it is advisable, but this should not be done by decreasing the size of the living room, which should be as large as possible. The dining room is connected with living room by a cased opening, and with the kitchen by a convenient pantry.

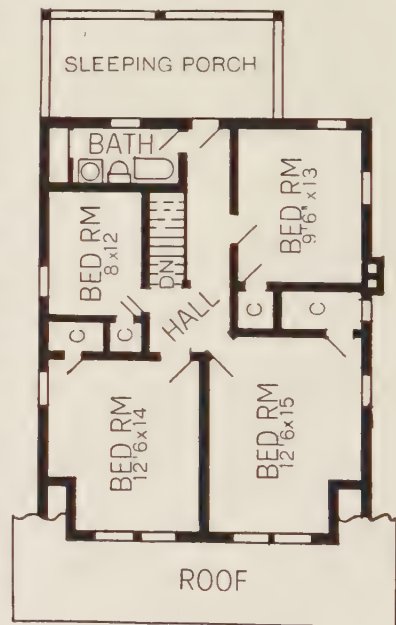
This design should be built for from \$3,000.00

to \$3,500.00 in any locality, using a good grade of material and equipment throughout.

No. 146—Size 26 x 38 feet. Price of Plans \$25.00. Price of Specifications \$5.00.



FIRST FLOOR



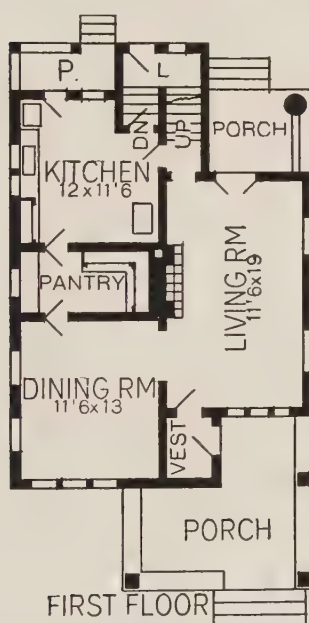
SECOND FLOOR





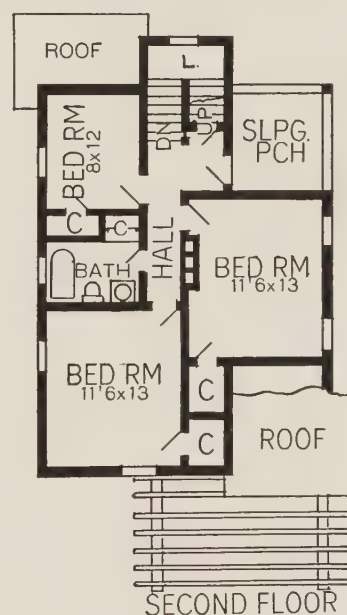
A VARIATION OF NO. 104.

Our No. 105 and 104 have been so popular with our clients that a great number of variations of these two houses have been developed and this plan is one of them. In this plan a pantry has been provided between the kitchen and dining room, while the stairway arrangement is the same as in No. 104. The chimney and mantel have been



placed upon the inside of the living room, thereby giving an opportunity for a single chimney in the house, as a kitchen flue, furnace flue and a fireplace flue are all provided in the single chimney, thereby eliminating the expense of a separate kitchen chimney. Three bedrooms and a sleeping porch are provided on the second floor and a conveniently located bathroom. This house will be liked by anyone and provides for the maximum convenience with the minimum expense.

This house will cost about the same as No. 104, and should be built



for \$2,500.00 under average building conditions, using a good grade of material and workmanship throughout; hardwood trim on first floor, white enamel in bedrooms and bath, first class plumbing and hot air furnace.

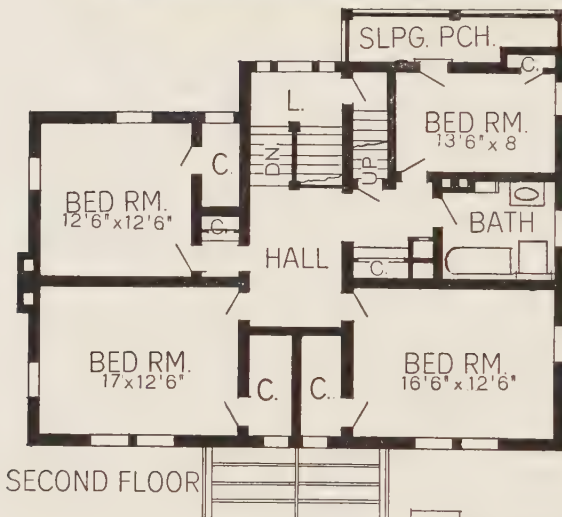
No. 104-A—Size 24 x 32 feet. Price of Plans \$25.00. Price of Specifications \$5.00.



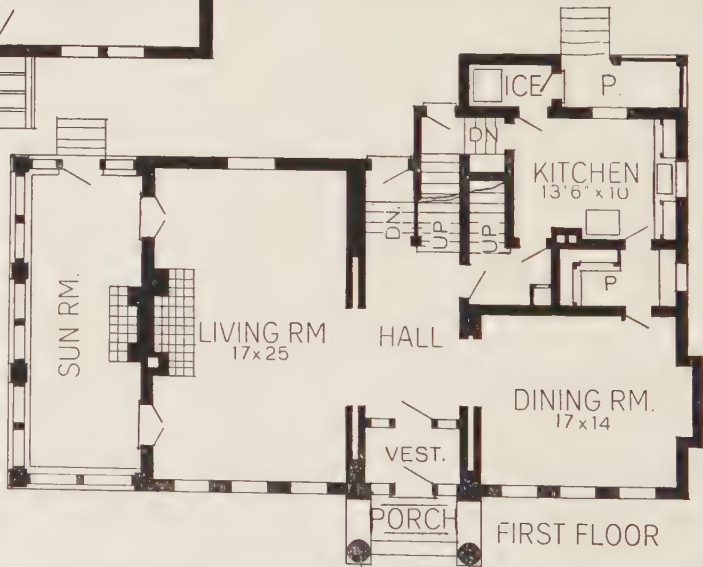
### A COLONIAL RESIDENCE

This residence is of the pure type of Colonial architecture and is carried out in wide siding painted white and the roof is, in this case, of black slate. The entire design has been made on the simplest lines, which has resulted in supreme dignity and good character.

The floor plans have rooms all of ample size and being of the center hall type open up these rooms to each other in the magnificent manner that only this type of plan affords. The kitchen has access to the front door



without passing through any rooms and has a convenient arrangement of kitchen accessories together with the ice room and porch, both off the kitchen. The sun room at the end of the house is reached from the living room through French doors at each side of the fireplace and is arranged to be enclosed with screens or glass. The entrance on the front has been made as simple as possible and in keeping with the gen-





eral outline of the house. The second floor provides for four bedrooms and bath and is reached by a stairway from the hall and from the kitchen in combination. The rear bedroom has a sleeping porch and closet over the kitchen porch. Linen closets are conveniently placed near the bathroom and a clothes chute at the door of the bathroom extends to the basement.

A house of this size, design and equipment would cost about \$7,000.00 under average building conditions.

No. 215—Size 48 x 32 feet. Price of Plans \$70.00. Price of Specifications \$5.00.



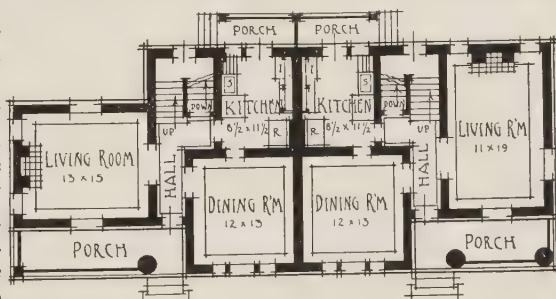
### A PAIR OF COTTAGES

In this design for a pair of cottages, with a rather interesting and symmetrical treatment of the exterior, red brick is used for the exterior, except in the large twin gable ends which are of frame, covered with wide lap siding. The roof is covered with black slate. Like No. 120 each porch is entirely separated from the other by the body of the house. The exterior combination, of red brick, white siding and white window frames with black slate is exceedingly pleasing.

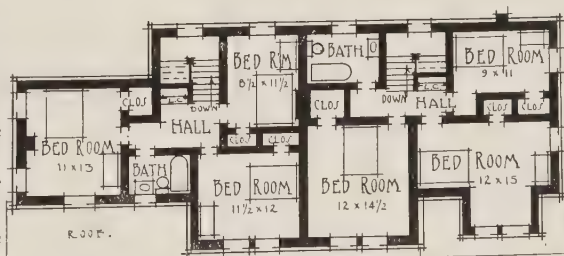
This plan is built on a very shallow lot with plenty of length, and in each house the living room has light on three sides, while the dining rooms are amply lighted from the front. The kitchen is well arranged and has convenient access to the second floor or to the basement. The front door is accessible from the kitchen through the center hall in each cottage. Bedrooms and bathrooms are large, and ample closet space is provided. The linen closet is in the second floor hall. Basement is built under the entire house, and is entered from the grade landings at the rear. No attic.

Cost \$5,200.00. Can be built for from \$4,500.00 to \$6,000.00.

No. 121—Size 61 x 27 feet. Price of Plans \$35.00. Price of Specifications \$5.00.



FIRST FLOOR

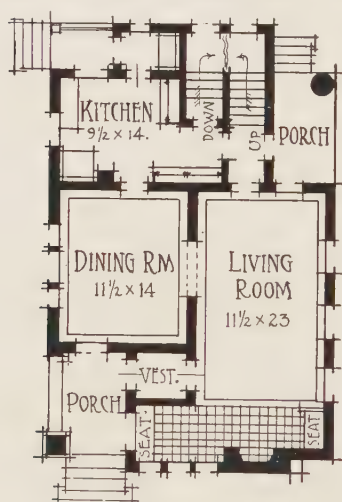


SECOND FLOOR



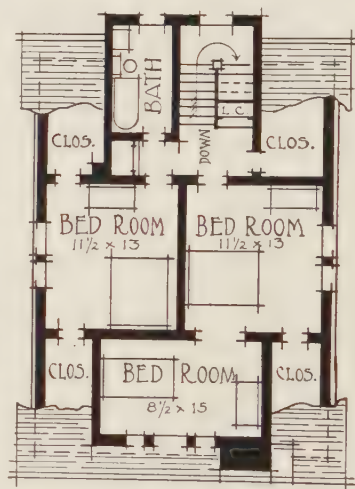
### A MODERN ENGLISH COTTAGE

This is a typical modern English cottage, and a most delightful home for a small family. The large chimney combined with the casement windows lends character and a sense of coziness to the home. The pleasing effect of the exterior is enhanced by the use of extra wide lap siding stained brown with the roof in black slate.



FIRST FLOOR

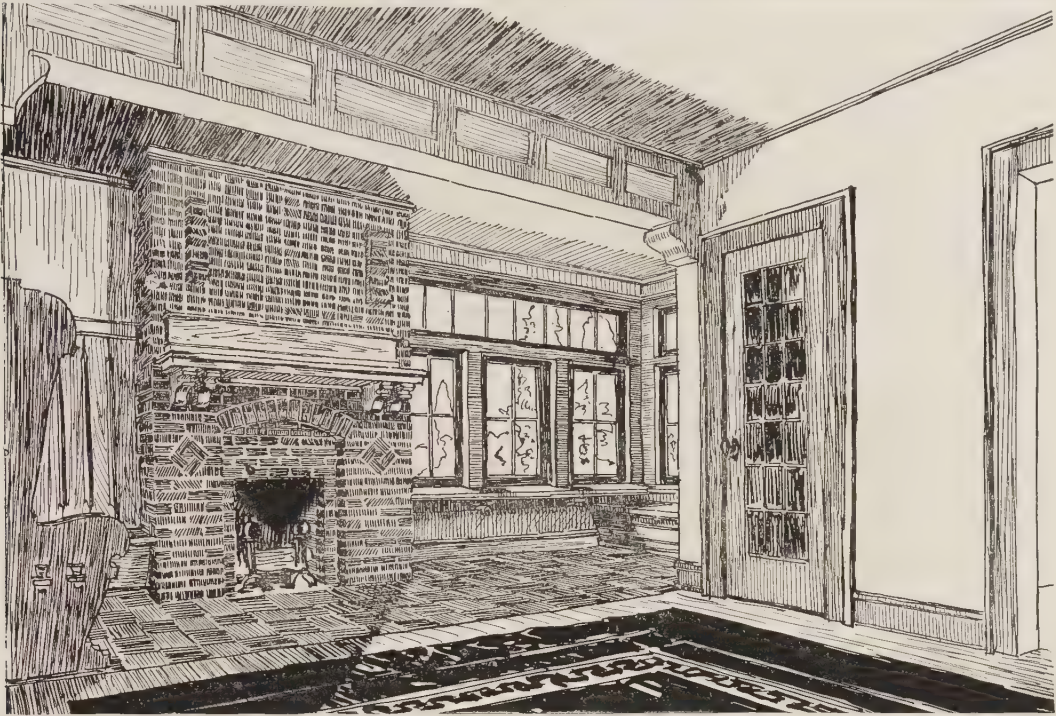
Considering the size and cost of this home the amount of room given is extraordinary. The house is entered through a vestibule and directly in the front of the living room is a large fireplace set in a tiled nook which has a seat at each end and a row of windows extending from one side of the mantel to the corner of the vestibule, giving an elegant vista from the living room. The stairs are directly accessible from the living room as well as from the kitchen.



SECOND FLOOR

A porch overlooking the garden is reached through a French window from the rear of the living room. The kitchen is complete and convenient in every detail with a well lighted sink and an ice room. The second floor has three large bedrooms, one of which is a child's room or a sewing room. Large closets, linen closets, storage closet and a large bathroom complete the home. This house is a splendid example of what can be done with little money by careful planning, and has been built, as shown, and with various modifications, all over the United States. We show a number of photographs of different developments of the exterior, and a few of the variations in floor plan are





Ingle nook in Nos. 105.-105A-105B-105D.

shown under designs Nos. 105-A, 105-B, 105-C and 105-D. We can furnish plans combining any of these variations in our design.

As a summer cottage, this design could be built for about \$1,300.00. With complete equipment it has been built for from \$2,500.00 to \$3,800.00. This variation being due to local conditions and the kind and quality of materials and labor used.

No. 105—Size 24 x 36 feet. Cost \$2,500.00 as shown. Price of Plans \$25.00. Price of Specifications \$5.00.



No. 105 as built in New Jersey



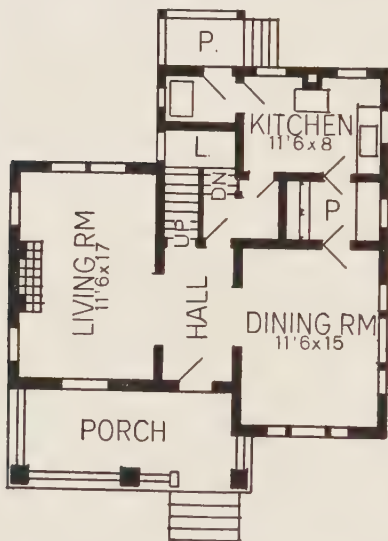
No. 105 as built in Ohio

Directions for ordering plans on page 288. For special designs see page 150.



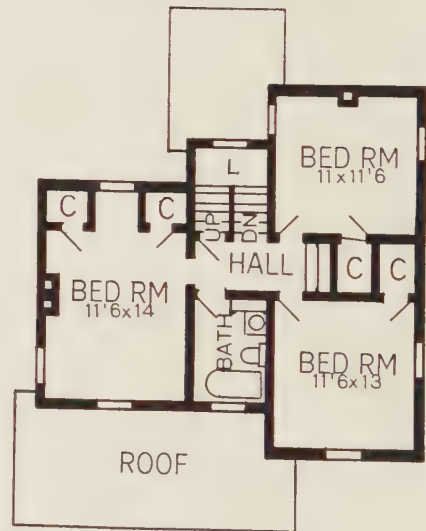
### A SHINGLE HOUSE

In this house the entire exterior is carried out in shingles and the unity in effect is gained by eliminating the horizontal belt courses and by a carefully proportioned location of windows. The foundation is in brick and the shingles while stained brown would bear other color treatments, depending upon the location, and the roof is of



shingles stained a darker shade of the same color as the side walls. The window sash and bars are picked out in white while all other trimming is stained to match the shingles.

The center hall type of plan is here worked out in an economical manner, both as to arrangement and size for



working lumber. The living room occupies one entire side, while the dining room, pantry and kitchen balance the same on the other side. A small ice room is provided off the kitchen, through which a porch upon the rear is reached. The second floor has three bedrooms with ample closets and the bathroom is over the first floor hall. The entire plan is carefully studied and no space is wasted anywhere.

This house should be built for from \$3,000.00 to \$4,000.00, depending on local building conditions; \$3,500.00 would be a fair cost in most localities.

No. 156—Size 31 x 30 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.



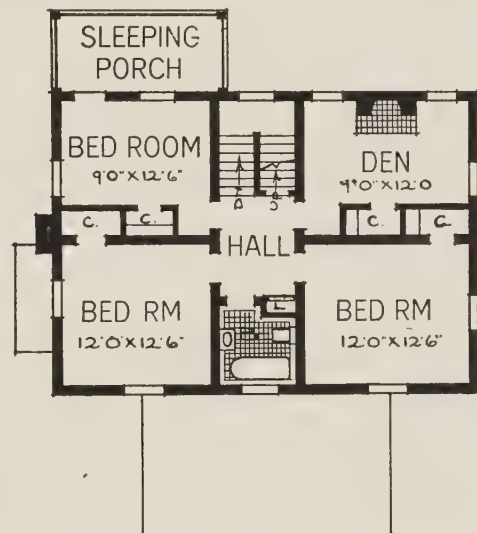
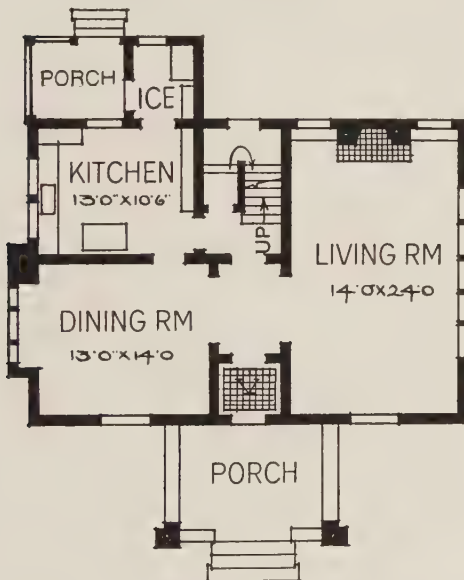


### A SIMPLE COLONIAL HOUSE

The exterior of this house has been treated in the simplest manner possible with ordinary siding carried from the water table up to the eaves and into the gables without being broken by horizontal belt courses.

In the plan the dining room and living room are on the front and are separated by a center hall. The kitchen and ice room are on the rear and the stairs are

enclosed from the balance of the first floor, making it possible for comfort in extreme cold weather without the use of an expensive heating plant. The second floor has four bedrooms, one of which is provided with a mantel and is used as a den. A sleeping porch is built over the kitchen porch and ice room, off of the rear bedroom and the bathroom is located



over the vestibule. The porch upon the front is built with brick piers and stone steps, and has a wood floor. The attic is finished in one large room and the basement has provision for a laundry, fruit closets, furnace and coal room.

This house has been built for \$4,200.00 with good material and workmanship, hot water heating plant and good plumbing fixtures. This cost could be reduced to about \$4,000.00, but might run to \$5,000.00 under unfavorable building conditions.

No. 159—Size 35 x 25 feet. Price of Plans \$35.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.



### A DUTCH COLONIAL HOUSE

This home is one of extraordinary artistic worth and possesses the quality of extreme richness without being assertive.

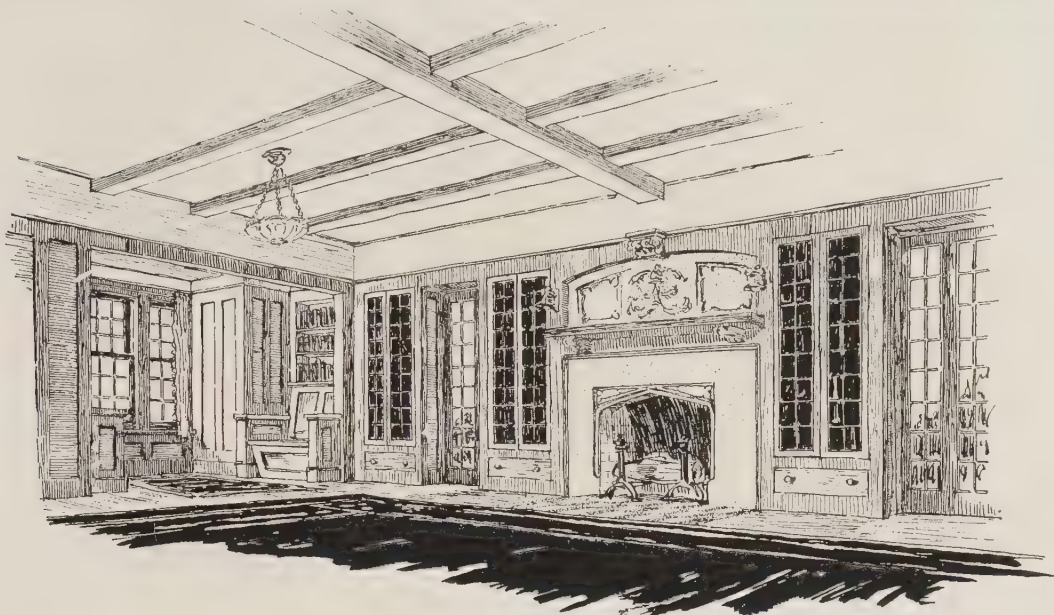
The entire house is of frame construction and the first story, dormers and gables are covered with 24-inch shingles laid 10 inches to the weather and painted white. The windows are cut up in small panes of glass and add immensely to the quaint character of the whole design. The roof is of shingles in grey tone and the chimney is in red brick. The gambrel roof, together with the general color scheme and the small cut up sash, are features that contribute to the quiet dignity of the whole mass.

The floor plan is as interesting as the exterior and the drawings call for arrangement and detail that bears out the atmosphere of the exterior. The living room, being entered through a small vestibule, occupies the entire end, off of which is a large enclosed porch. Both rooms are provided with a fireplace, carefully designed and detailed in the same

character as the house in general. An alcove or window nook is provided in the front of the living room with seats at each side, above which are placed bookcases. The stairs to the second floor lead directly from the living room to a landing, which is also reached by a rear stairway from the kitchen. A rear hall with a lavatory make a convenient connection from the entire house to the rear porch. The kitchen and pantry are complete and of ample size and provide all of the necessary space for the general kitchen work and are arranged to embody the least amount of labor and exertion. The dining room with the front bay balancing that of the living room is of ample size and has a buffet with china cabinets at each side and windows over same that terminate a vista from the living room through a broad archway. The second floor has







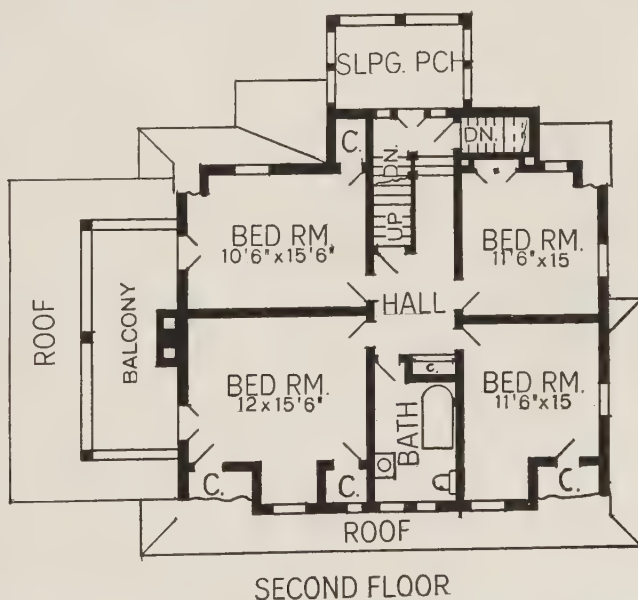
Sketch of Living Room in No. 217

four large bedrooms and a bath with a balcony over the porch and a sleeping porch is arranged off of the stair landing in the rear. Each room has an ample closet and the attic is finished in one large room. The entrance stoop is paved in brick and the steps leading to the terrace across the front and side are in brick also.

The living room is finished in chestnut with panel wainscot extending to top of doors and windows, and plain beams are carried in the ceiling. This finish is stained a rich brown and waxed, which brings out the coarse grain of the wood. The mantel facing and panel above are Caen stone, cut in an appropriate design. The dining room and entire second floor are finished in white enamel on birch, with mahogany doors, and the floors are oak throughout.

The entire home is designed for a large family who are able to indulge moderately in the luxury of a carefully designed and well built home.

By great economy in construction this house could be built for \$5,000.00, but could be elaborated so as to cost \$7,500.00 or \$8,000.00 without extravagances in material or detail.



SECOND FLOOR

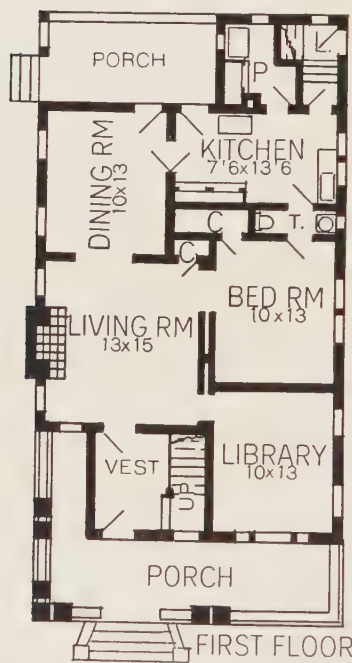
No. 217—Size 36 x 34 feet. Price of Plans \$67.50. Price of Specifications \$7.50.



### A SEVEN-ROOM BUNGALOW

This bungalow is built of frame with ordinary siding and a shingle roof. The porch railing and foundation is built of rock face stone, with a cut stone railing on each side of the steps and with steps also of cut stone.

The first floor has, in addition to the dining room, living room and kitchen, a good



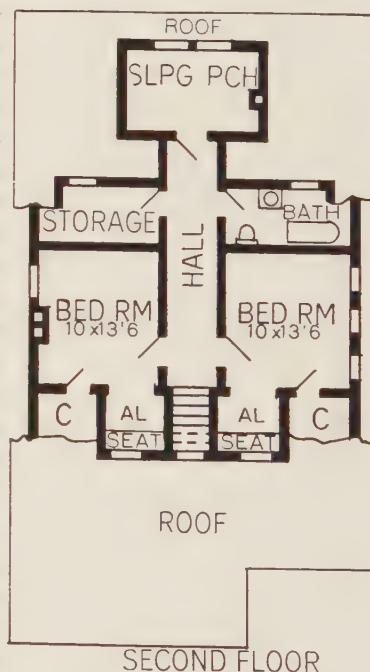
sized entrance vestibule, a library, bedroom, good closet and toilet room, grade landing, stairs from the kitchen and butler's pantry and an ample size rear porch, which can be used as a dining porch. The second floor has two bedrooms, bathroom, window seats in the alcoves off of each of the two bedrooms, a sleeping porch on the rear and a storage space off the hall. A very complete bungalow.

We would suggest hardwood floors throughout. The living room, dining room and library should be finished in oak, stained

and waxed, while the bedrooms and bath should be in white enamel.

Under average conditions this bungalow could be built for about \$4,500.00.

No. 158—Size 25 x 47 feet. Price of Plans \$35.00. Price of Specifications \$5.00.

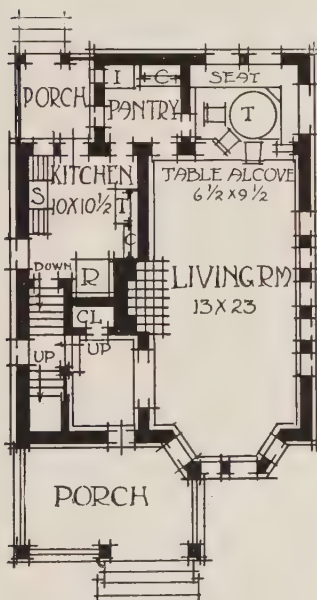






### A MODERN GERMAN TYPE

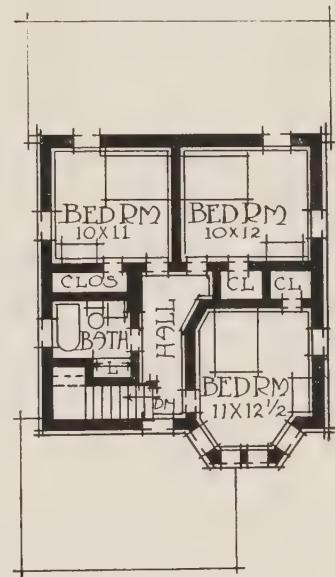
This home, possessing the feeling and character of the modern German trend in architecture, is constructed of hollow tile and the walls cemented. The roof has red slate and the woodwork upon the exterior is stained gray; a very inexpensive and artistic home.



FIRST FLOOR

The main part of this house is only 24 x 24 feet in size and contains a very large living room, hall, kitchen, three bedrooms, a bathroom and a coat closet on the main floor. The pantry and dining alcove are in a small one story wing at the rear. A basement and small attic complete the plan. Nothing could be more compact and at the same time more liveable—a truly delightful home.

On account of the simplicity of design this house should be inexpensive to construct in hollow tile, and should be built in that material under \$3,000.00. In stucco on frame or in



SECOND FLOOR

lap siding or shingles on frame it should be built for from \$2,300.00 to \$2,500.00.

No. 140—Size 24 x 30 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.

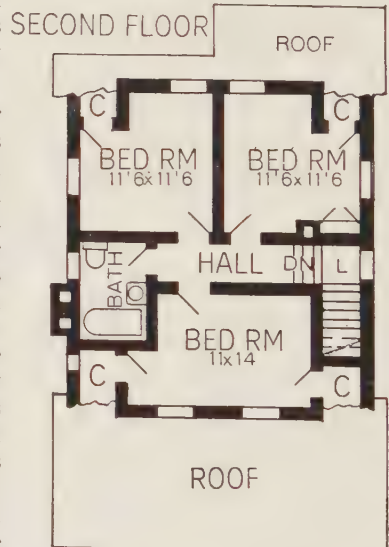
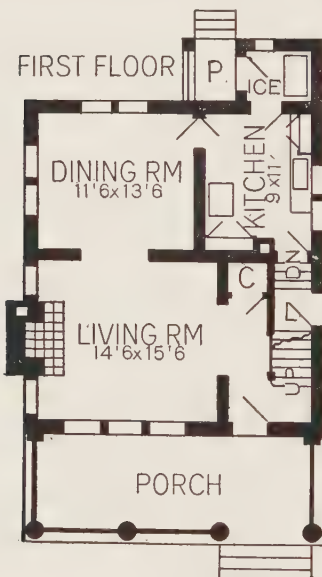


### A DUTCH COLONIAL COTTAGE

A small cottage worked out with wide siding upon the walls and with a slate roof, which presents a pleasing appearance to the eye and possesses the high degree of character that is always apparent in the Dutch Colonial type of residence architecture. The foundation is of rough shale brick, the same as the chimneys and the side walls are

painted cream color with the trimmings and columns in white, the roof is in grey green slate.

The floor plans call for three rooms down stairs and three rooms and bath on the second floor with no attic. The basement is under the entire house and the grade landing is arranged on the stairs from the kitchen to basement. A coat closet off of the entry hall is conveniently located and the kitchen has a sink placed underneath the windows, which affords good light for the same. A refrigerator is placed in the outer room off the kitchen, which is also



desirable, placing the ice box in a convenient location for icing and providing at the same time a cold room off of the kitchen. The second floor has three bedrooms grouped around a small hall and each bedroom has a closet under the roof, while the front bedroom has a window in one of the closets.

This design can be built for about \$2,500.00 using a good grade of material, and complete equipment throughout.

No. 169—Size 24 x 27 feet. Price of Plans \$20.00. Price of Specifications \$5.00.

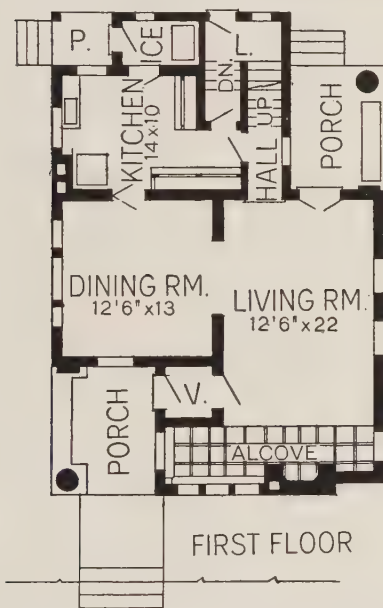




A COBBLESTONE, BRICK AND SHINGLE COMBINATION.

In this adaptation of our original No. 105 field stone has been used for the spur walls to the steps and the foundation to the porch, while brick has been used for the balance of the chimney. The side walls are in shingles as also the roof.

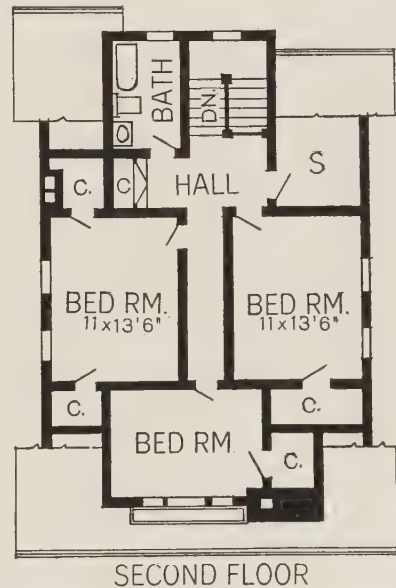
The vestibule and fireplace alcove are provided in this plan and the stair and kitchen



arrangement is the same as No. 105-C, while the second floor plan will fit either of the two plans.

Variations in bathroom, side porch and storage room as indicated on No. 105-A and B can be made at option of purchaser.

This house should be built with a good grade of plumbing fixtures, good furnace and first class



material and workmanship throughout for about \$3,000.00.

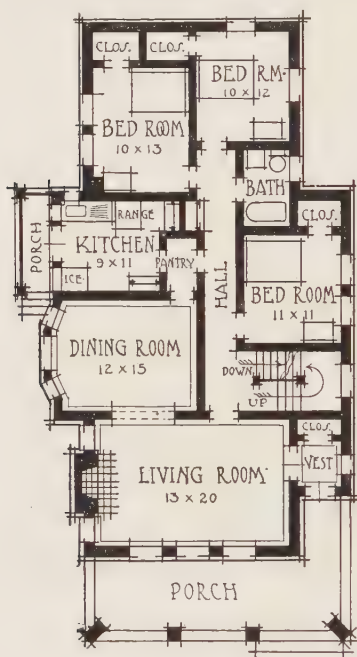
The illustration shows the house with floor plan reversed. We will furnish plans of any design reversed with no extra charge, and can incorporate desired features from any of the No. 105 series, in the design selected without extra charge.

No. 105-D—Size 26 x 36 feet. Price of Plans \$27.50. Price of Specifications \$5.00.



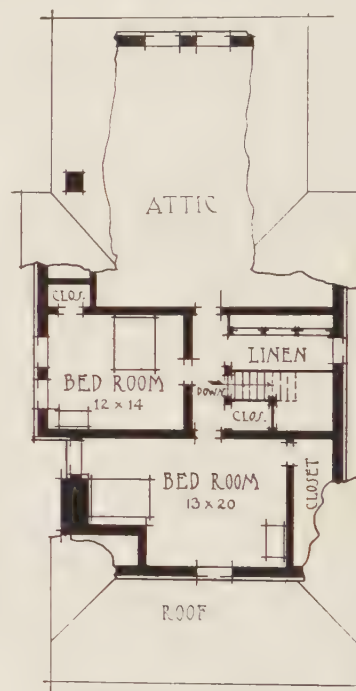
### A LARGE BUNGALOW

A cement bungalow for a large family with more room than is usually provided in this class of home. We would suggest a color scheme for the exterior, similar to that described in No. 101.



FIRST FLOOR

A glance at this floor plan will reveal the absolute privacy of the sleeping quarters from the living rooms. The kitchen is so arranged that the pantry keeps the odors of cooking from both the dining room and bedrooms. The stairway to second floor is conveniently placed with relation to the living room and at the same time gives access from the second floor bedrooms to the bath without passing through living rooms. Closets are ample and a linen



SECOND FLOOR

closet with drawers and shelves is provided at the head of the stairs. The rear portion of second floor provides a large attic, and a second bath or extra bedroom may be added on this floor.

Cost \$3,500.00. Can be built for from \$1,400.00 to \$4,200.00, depending on type of construction used. The low figure would be as a summer cottage without plaster, heating plant or plumbing.

No. 114—Size 30 x 53 feet. Price of Plans \$27.50. Price of Specifications \$5.00.

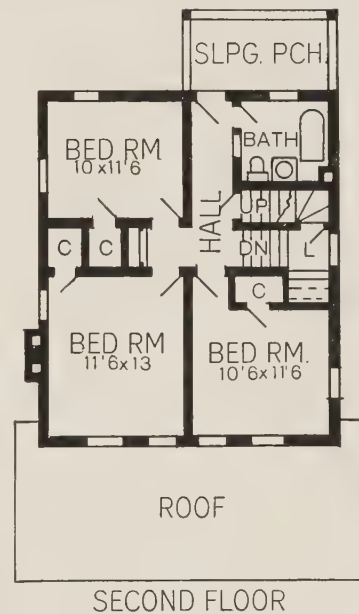
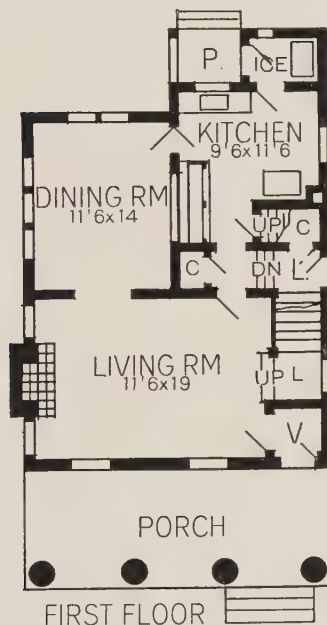




### A PICTURESQUE SIX-ROOM HOUSE

This house is an inexpensive but artistic home and one that bespeaks refinement and picturesqueness. The general color scheme is brown and white, while the roof is in black slate. The porch columns are carried out in a very light manner with neatly cut corbels under the beams supporting the porch roof. The upper story is in shingles and the lower story in ordinary lap siding.

The floor plan is a more elaborate arrangement of a six-room house than is contemplated in No. 149-A. The kitchen has a grade landing entrance to cellar, with combination stairway to the second floor, and the second floor has a sleeping porch over the kitchen porch and ice room, with an entrance off of the hall to same. The bedrooms are of ample size with windows and other openings arranged with supreme regard to the location of furniture. The kitchen is larger than that of No. 149-A and



has space arranged for every necessary kitchen equipment.

The cost of this house as shown was \$3,000.00. By economy in construction, and under favorable building conditions this cost might be reduced to \$2,500.00. In no case should the cost run over \$3,300.00.

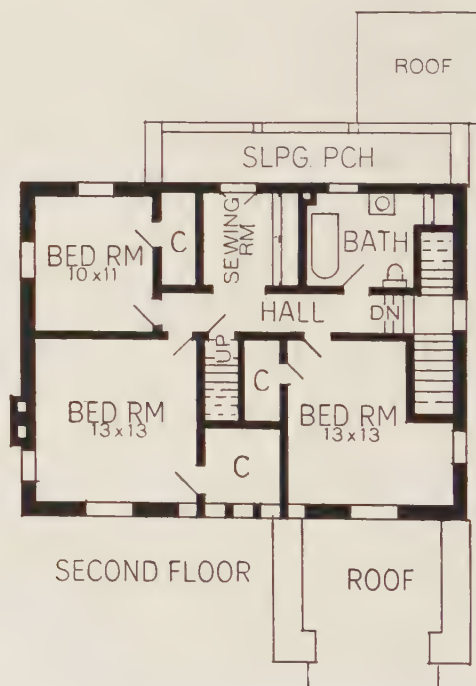
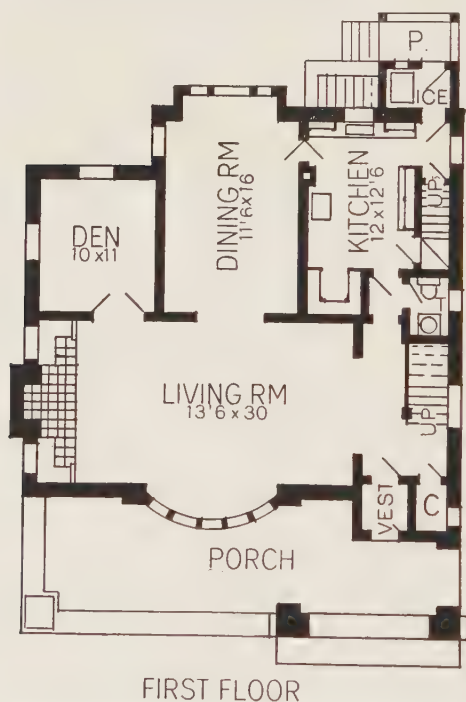
No. 170—Size 24 x 28 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.



A BRICK AND CEMENT HOUSE

This house is designed on simple lines and relies entirely upon the location and size of openings as well as the combination of materials for this quaint effect. The brick used upon the exterior from the grade line to the sills of the second floor windows is a rough face brick of various shades and colors and the plaster on the second floor and in the gables is on hollow tile, and a light cream in color. The open terrace across the front allows for ample light into the living room and the circular bay presents a very charming view from the exterior, and a beautiful vista in looking through from the dining room towards the front of the house.





The house is entered by means of a covered porch at the doorway, through a vestibule, into a stair hall. The living room extends from this hall to the opposite wall, and is terminated with a fireplace and seats forming an ingle-nook across the end. The dining room opens off of the center of the living room and extends to the rear, and the second floor is reached both from the front stair hall and from the kitchen. The cellar is accessible from the kitchen and also from the outside cellarway at the rear of the house. The first floor is also provided with a den or library off of the living room with glass doors in the opening. The second floor has three bedrooms, each with ample closets, and a sewing room, which opens up on to a sleeping porch on the rear. The bathroom, which is over the kitchen, is very large and has in it a towel closet, a feature which is very convenient.

Under average building conditions this house can be built for about \$7,000.00, using a good grade of material and workmanship.

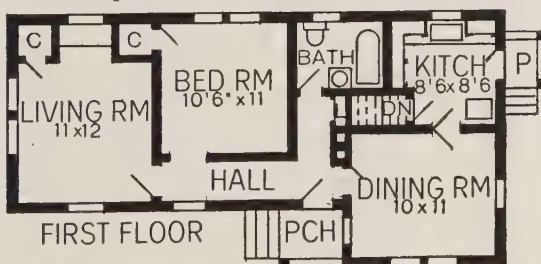
No. 216—Size 36 x 32. Price of Plans \$50.00. Price of Specifications \$7.50.



### A FOUR-ROOM BUNGALOW

In this is shown again the smaller type of residence and like the others expresses good taste upon the exterior and a convenient plan.

The first floor is entered from a small stoop into a hall off of which is placed a living room at one end, a dining room at the other with bedroom and bathroom in the center. The kitchen while small has every feature necessary for complete house work and for doing the required cooking for as many people as the dining room might contain. A cellar is placed under a part of the house, which is reached by a stairway from the



kitchen. Storage space is provided in the attic, which is well ventilated.

As a summer cottage this design could be built for about \$800.00. With furnace, good plumbing, and high grade finish it should not cost to exceed \$1,200.00.

No. 193—Size 20 x 39 feet. Price of Plans \$10.00. Price of Specifications \$2.50.

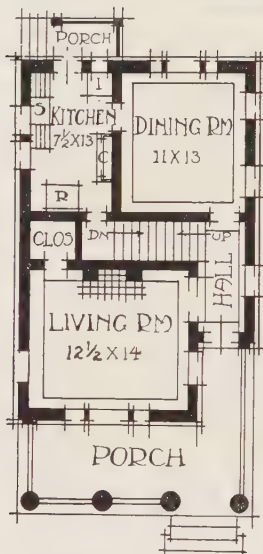


### AN INEXPENSIVE HOUSE

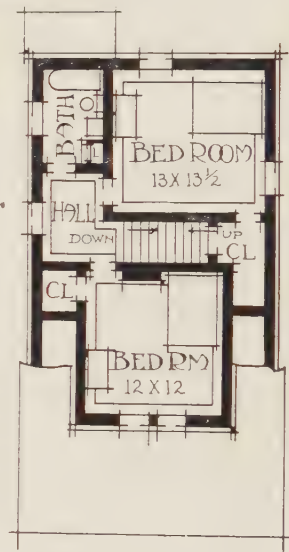
The plan is very simple and compact and shows a small kitchen with the cupboards, range, sink and refrigerator so conveniently placed that many steps will be saved in doing housework. This, together with the wonderfully good lighting and ventilation, has caused much favorable comment upon this house. Two bedrooms and bath are provided on second floor; also an unfinished attic, with a basement under the entire house. In this house one chimney answers all purposes and helps to make it a very inexpensive home.

Cost \$2,000.00 as shown. Can be built for from \$1,800.00 to \$2,500.00.

No. 133—Size 20 x 30 feet. Price of Plans \$20.00. Price of Specifications \$5.00.



FIRST FLOOR



SECOND FLOOR



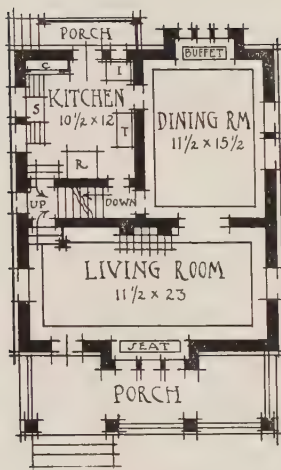
Developments of No. 112. For floor plans see page 278.

Directions for ordering plans on page 288. For special designs see page 150.





### A SIX-ROOM COTTAGE

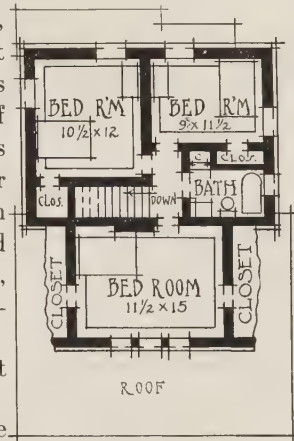


FIRST FLOOR

This is a delightful little cottage, very similar to No. 132 except that the second floor has three bedrooms and a wide seat is built in the bay off the living room. Ample closet space is provided and a basement extends under the whole building with entrance from the kitchen. No space is wasted and the use of a single chimney for kitchen, mantel and furnace makes this an economical home to build.

Cost \$2,400.00. Minimum cost \$2,200.00; maximum \$3,000.00.

No. 135—Size 24 x 28 feet. Price of Plans \$20.00. Price of Specifications \$5.00.



SECOND FLOOR

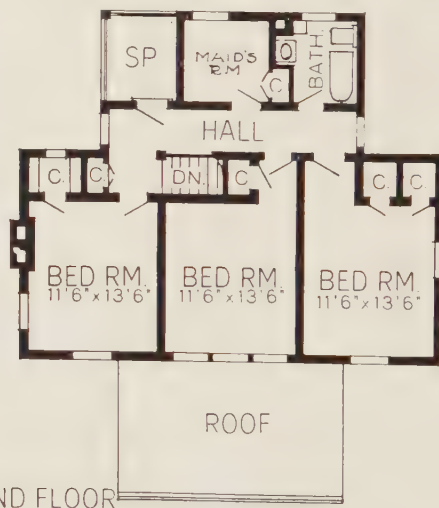
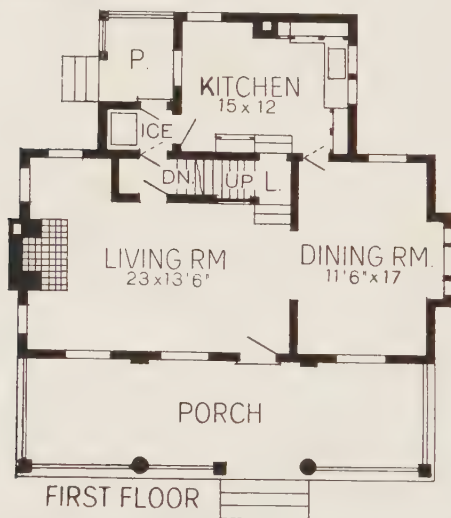


Rear view of No. 118 showing pergola over dining room entry  
For plans see page 196.



### A SHINGLE AND CLAPBOARD HOUSE

The exterior of this house is after the lines of our No. 117 but done with the lower story in ordinary lap siding and the upper story and gables of shingles stained brown and the roof in black slate. The chimney has been carried out in a shale brick in a general tone of dark red.



The floor plans provide for three rooms down stairs with a large porch across the front and an ample kitchen porch at the rear. The living room and dining room, as also the stairs and second floor hall have hardwood finish and floors, while the bedrooms, three of which are placed across the front, are finished in white enamel and have hardwood floors. The maid's room and the bathroom are placed over the kitchen. A sleeping porch is provided over the kitchen porch.

This house has been built for \$4,000.00. Under favorable conditions it might be built for less, but if location would warrant, \$4,500.00 could be spent on it to advantage.

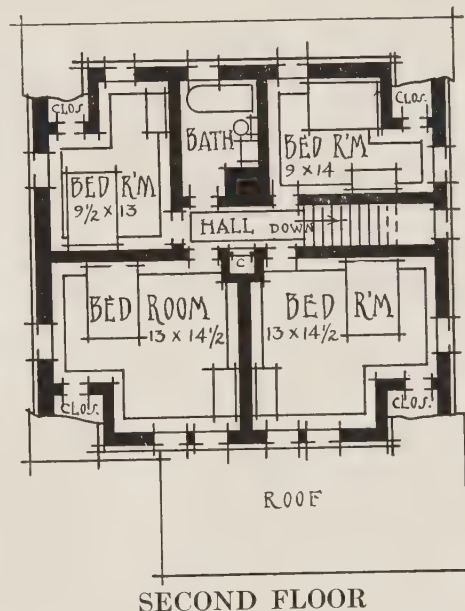
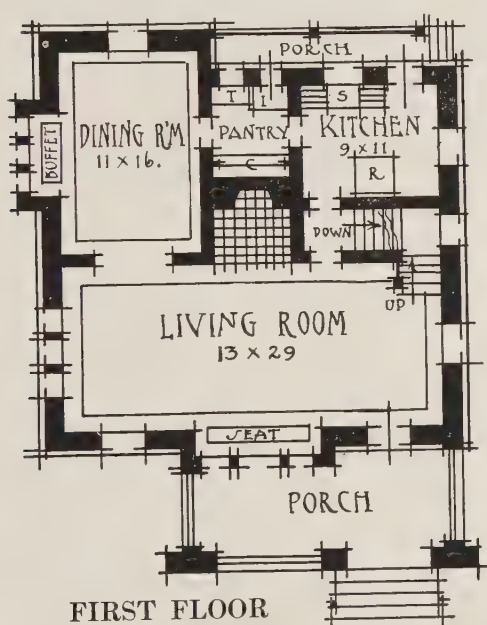
No. 172—Size 36 x 30 feet. Price of Plans \$30.00. Price of Specifications \$5.00.





## AN AMERICAN HOME

An unusual and picturesque treatment for an American home, possessing character and an air of solidity. The walls to the second story window sills are plastered and the areas above, are treated with vertical boards and battens, stained brown. The roof is shingled and stained moss green, while the cemented portions are tinted a



light buff and waterproofed. The large living room across the entire front of the house has a window seat on the front wall and a fireplace directly opposite in an angle-nook. The dining room has a square bay, and pantry and kitchen arrangement is ideal. The second floor has four bedrooms, bath, linen closet and roomy closets off each bedroom. Basement under entire house. Cost \$3,800.00. Minimum cost \$3,000.00; maximum cost \$4,500.00.

No. 137—Size 30 x 28 feet. Price of Plans \$30.00. Price of Specifications \$5.00.

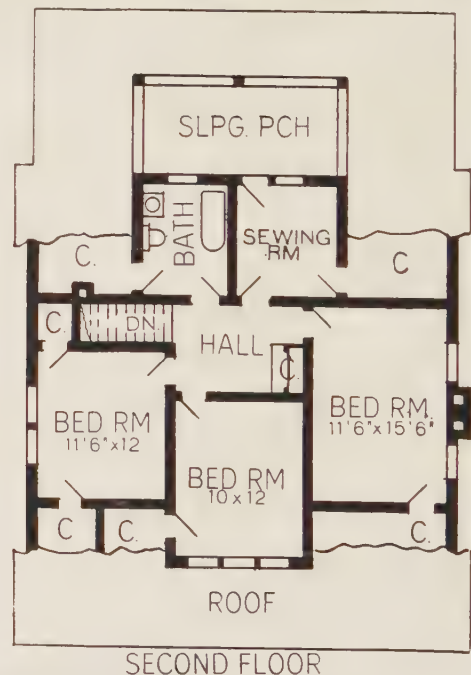
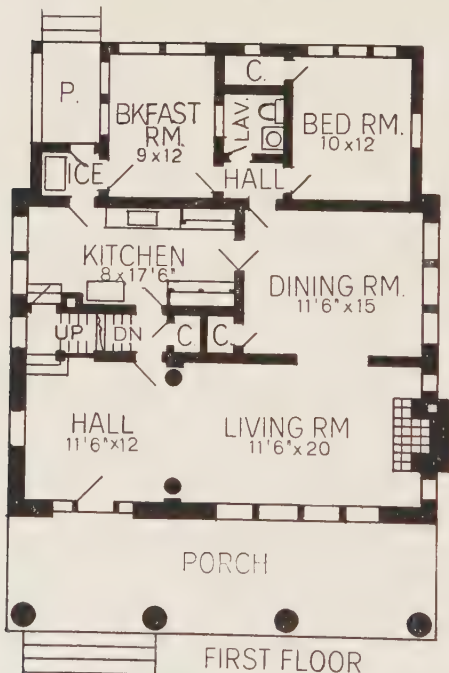
Directions for ordering plans on page 288. For special designs see page 150.



### AN ENGLISH COTTAGE BUNGALOW

The elegant lines of this house are gained by bringing the eaves down over the first story windows and by the dormer carried out to represent a thatch roof with the shingles laced into the main roof. The first floor and chimney are in red brick. The gable ends and rear wing are carried out in half timber with plastered panels on wood. The low effect is also enhanced by terracing up the lawn to the porch floor level, which also eliminates the necessity of a railing around the porch.

The living room and hall occupy the entire front of the house and are separated with pillars in such a manner as to form a division in architectural expression of the





interior, but at the same time serving as one long room. The dining room opening off of the rear of the living room has also a doorway at the rear of same, leading into a small hall which gives connection to a first floor bedroom with lavatory and a breakfast room. The kitchen has an ice room and kitchen porch and a combination stairway from the kitchen and hall leads up to the second floor. The second floor has three bedrooms, sewing room, a sleeping porch off of the sewing room and a complete bathroom with a linen closet in the hall. No attic but storage space is provided off the sewing room and off the bathroom under the sloping portion of the roof.

This house could be built for from \$4,500.00 to \$5,000.00 with basement and complete heating plant. As built in the South and West the cost should not exceed \$4,000.00.

No. 189—Size 35 x 40 feet. Price of Plans \$45.00. Price of Specifications \$5.00.



### A SMALL COLONIAL COTTAGE

This house, which is a story and a half in height, indicates a high degree of artistic effect, which may be gained even in the smallest type of residence.

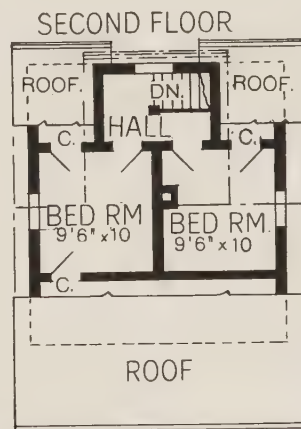
The first floor does not provide for a dining room, the kitchen being used for both cooking and dining purposes. Two bedrooms are provided on the first floor and two



bedrooms on the second floor. It is intended to heat this house with stoves and the chimney is arranged so that each room can be heated with one chimney. The stairs to the second floor go up from the rear bedroom and the stairs to the basement are arranged off of the kitchen underneath those to the second floor.

The cost should not exceed \$900.00, and in some localities it could be built for less.

No. 210—Size 21 x 23 feet. Price of Plans \$5.00. Price of Specifications \$2.50.



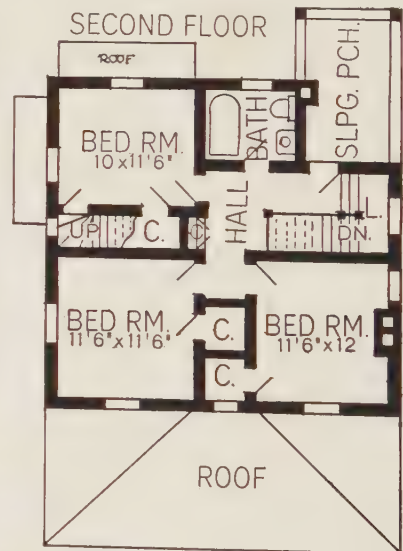
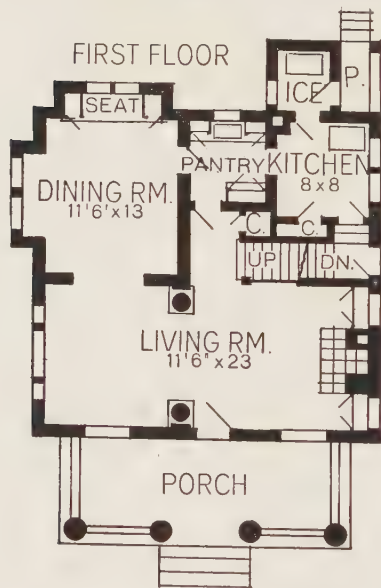


### A SMALL COLONIAL HOUSE

This house is carried out in wide siding upon a wood frame, broad overhanging eaves and a green shingle roof. The front porch is large and comfortable and the colonial effect is retained by the use of large white columns extending to the floor with the porch railing cut in between. The foundation is in red brick as is also the chimney

tops, while the siding and trimming is painted a light cream color. The window sash are cut up into small lights to add to the Colonial effect and the sash and muntins are painted white.

The living room has a fireplace with bookcases at one end and is divided with an archway just to the left of the entrance with large wood pillars. The stairway extends up directly from the living room. The three



bedrooms, stairs to attic and bathroom complete the arrangement of the second floor. The dining room at the rear of the living room has a buffet alcove and also window seat with china cabinets at each side. The kitchen is cut off from the dining room by a pantry. An ice room and kitchen stoop are provided at the rear.

This house should be built in most localities for about \$3,000.00.

No. 180—Size 28 x 26 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

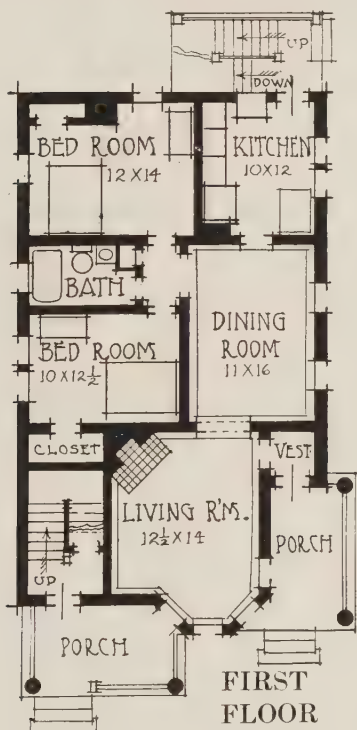




### A TWO-FAMILY FLAT HOUSE

This attractive two-family house has the appearance of a single dwelling. The grouping of windows in bay and gables and the attention devoted to details of trim, porch columns, etc., are the distinguishing features.

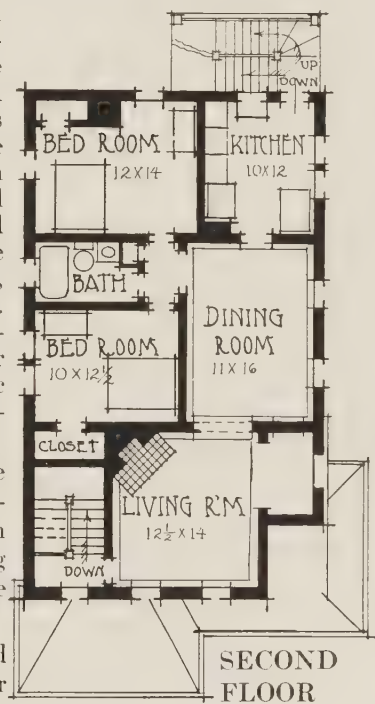
The first and second floors are practically the same, except that living room on



first floor has a well-lighted bay, which adds considerable to its size, while the second floor living room has large alcove which is equally attractive. The dining room and kitchen are light, roomy and well appointed. Bedrooms and bath are secluded from the living portions of the house, and have large closets. There are separate heating plants for each floor in the basement. Attic and basement space is provided for each family.

A house of this type makes a desirable investment as it can be built on a narrow lot and will bring in nearly twice the income of a single house.

A sleeping porch could be added at the rear for both flats at slight expense.



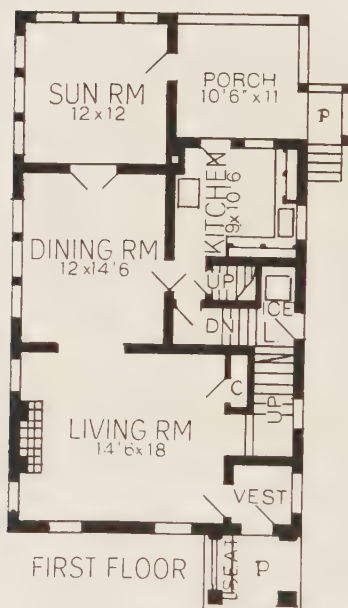
Cost \$3,800.00 as built. Can be built for \$3,500.00 to \$4,500.00.

No. 127—Size 25 x 42 feet. Price of Plans and Specifications \$25.00.

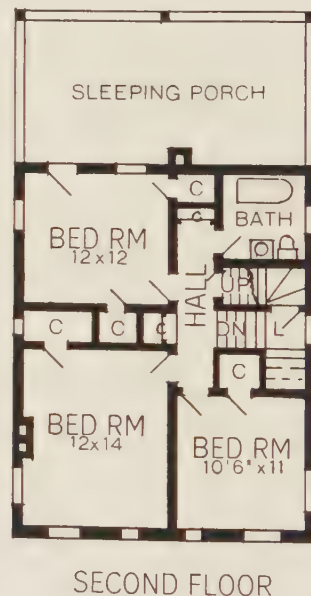


### A NEAT COLONIAL HOUSE

The exterior is carried out in the simplest possible manner and character is given to the general design by the entrance hood, carefully placed windows and a wood lattice between the living room windows, upon which rambler roses or other creeping vines may be trained.



The living room occupies nearly all of the front and is entered through a vestibule and has a stairway to the second floor, which is also reached in combination by a stairway from the kitchen. The dining room in the rear of the living room has an enclosed porch or sun room opening off of same and the kitchen has a large porch, which may be used for a summer dining room. The second floor has three bedrooms and bath with stair hall and stairs to attic and a large sleeping porch is placed across the rear where provision can be made for an awning cover. Basement extends under main portion of house, and attic is divided into one fair sized bedroom and finished storage room.



This house can be built under average conditions for about \$3,600.00. It could be elaborated to cost over \$4,000.00, or by economy in construction this cost could be reduced to \$3,300.00.

No. 192—Size 24 x 42 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

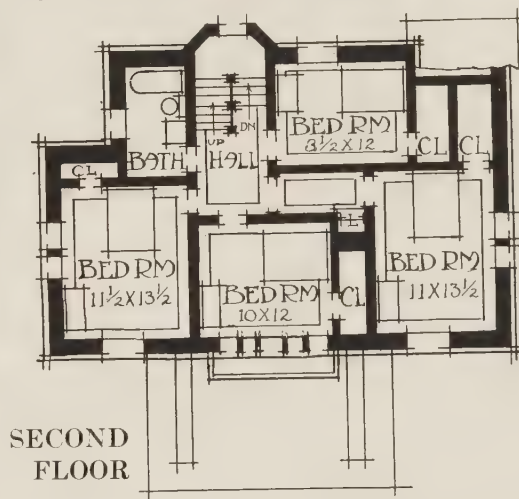
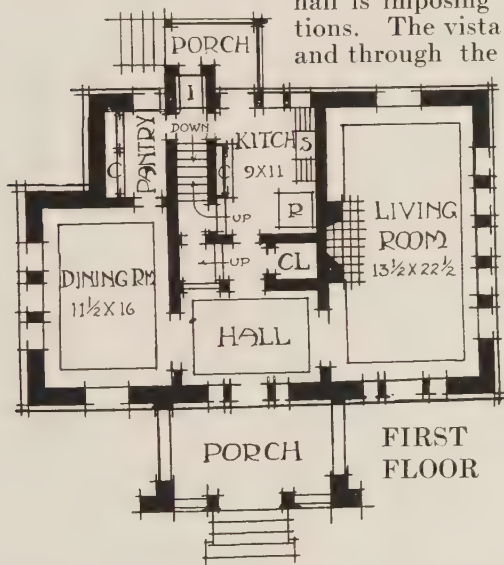
Directions for ordering plans on page 288. For special designs see page 150.





### A BRICK HOUSE

No material is as substantial looking as brick and when carefully laid up, with a simple pattern treatment upon the walls, a pleasing exterior is obtained. This is an economical plan with the kitchen placed in the center, at the rear, and access from same to the front hall. The living room is placed on one side of the house. The hall is imposing and the dining room is generous in proportions. The vista through the hall from the dining room towards and through the living room is delightful and most spacious



in appearance. The unusual stairway arrangement avoids the necessity of a rear stairs and at the same time provides easy access to the second floor from both the hall and the kitchen. The second floor provides four bedrooms, each with a closet, a bathroom and a linen closet. The attic is not finished and the basement extends under the entire house.

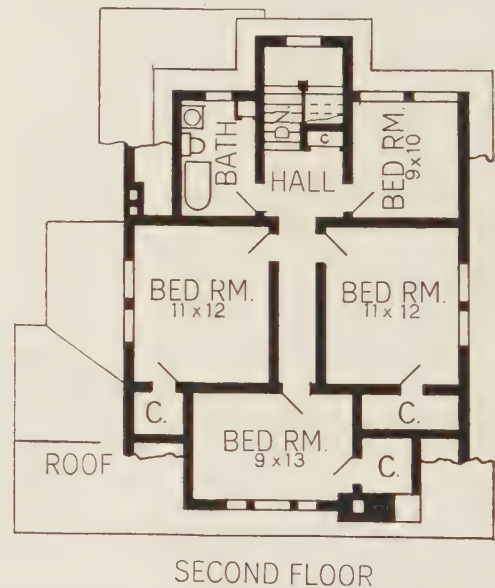
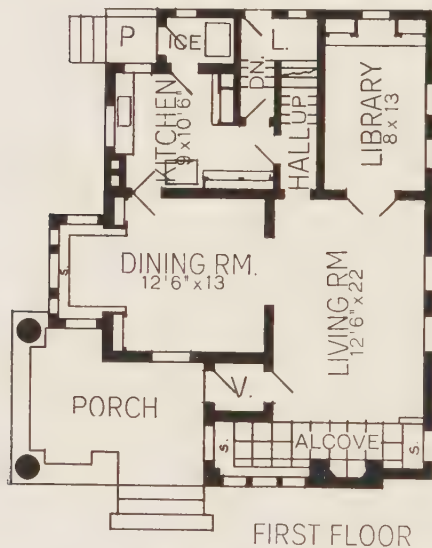
Cost \$5,500.00. Can be built for \$4,800.00 to \$6,000.00 in brick, or considerably cheaper in frame.

No. 129—Size 40 x 24 feet. Price of Plans \$35.00. Price of Specifications \$5.00.



### A COBBLESTONE TREATMENT

This has been built in a manner similar to 105-A, excepting that a cobble stone chimney and porch rail were used instead of brick, and presents an equally harmonious and artistic composition.



The first floor has a library off of the living room extending back to the rear stairway wall, while the second floor is the same in all respects to No. 105-A.

The additional cost of cobblestone instead of brick would depend on whether cobblestone or field stone were readily available. Outside of this item the cost should be the same as No. 105-A, from \$2,500.00 to \$3,500.00. We can furnish plans with combined desirable features from designs Nos. 105, 108, 105-A, 105-B, 105-C and 105-D.

No. 105-B—Size 26 x 36 feet. Price of Plans \$27.50. Price of Specifications \$5.00.

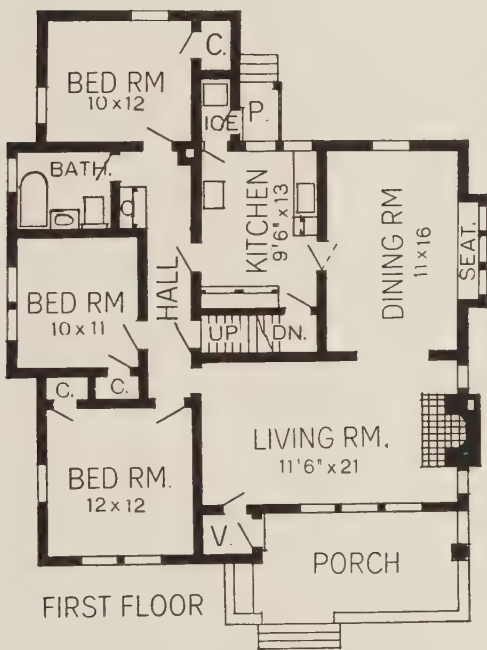




### A DEVELOPMENT OF No. 112

The exterior of this bungalow is very similar to No. 112 with an added gable and wing taking in the rear bedroom and with an alteration to take in the projecting bedroom and bathroom wing.

The floor plan provides for three bedrooms and bath in addition to the regular living



rooms and it will be noted that a connection to the bedrooms is arranged off of the living room as well as off of the kitchen, an ideal arrangement for a bungalow type of plan. The linen closet is placed near the bathroom and is also conveniently located with reference to all three bedrooms. The living room occupies over one-half of the front of the house and is entered through a small vestibule from the porch. The dining room opens up to the rear of the living room and the fireplace in the living room and seat in the dining room provide a general wall from front to back of the house of very much interest. The kitchen, which has an ice room and rear porch, is well lighted and has a stairway extending down to the basement over a stairway from the bedroom hall, which goes to the second floor. The second floor may be divided to suit and has ample room for three bedrooms, the arrangement being the same as second floor plan shown for design No. 112. The finish will be specified to meet requirements of individual taste.

This design should be built for about \$3,000.00 with basement and complete heating and plumbing equipment. As a summer cottage it could be built for much less.

No. 199—Size 38 x 48 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.



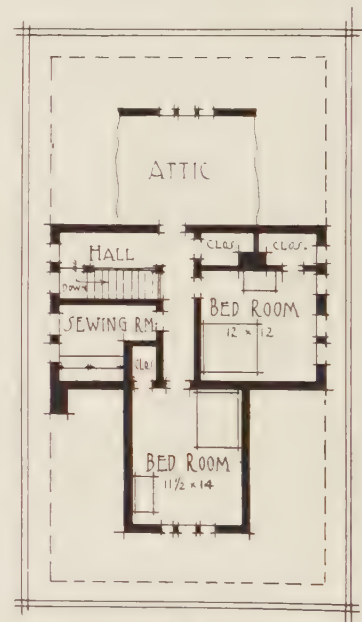
### A BUNGALOW

The bungalow is a type of house rapidly becoming popular throughout the country, but on account of the fact that they are usually inexpensive, architects have not given their planning serious thought and study. As a consequence in many of them the rooms are mixed up in the most indiscriminate manner; bedrooms and bathroom have no privacy and the odors from the kitchen permeate every portion of the house. All this can be easily obviated by a little care and study.



FIRST FLOOR

In this bungalow the kitchen is separated from the dining room by the butler's pantry. The sleeping rooms and bath are on a hall, which is completely shut off from the living portion of the house. The bathroom is accessible from any of the bedrooms, including those on the second floor, without passing through the living rooms. The second floor contains two bedrooms, sewing room and attic, reached by stairs from the hall. All bedrooms have large closets. In a cold climate it would be advisable to have a basement under the entire house, but in many States a small basement would be sufficient. The



SECOND FLOOR

cost given can be materially reduced in many ways; the construction may be lighter and the second floor could be left unfinished.

Cost \$3,200.00 as built for Northern climate; as built in the South or West the cost should not exceed \$1,500.00.

No. 107—Size 28 x 44 feet. Price of Plans \$25.00. Price of specifications \$5.00.

Plans for this bungalow are also furnished in 26, 30 and 32-foot widths at the same price.

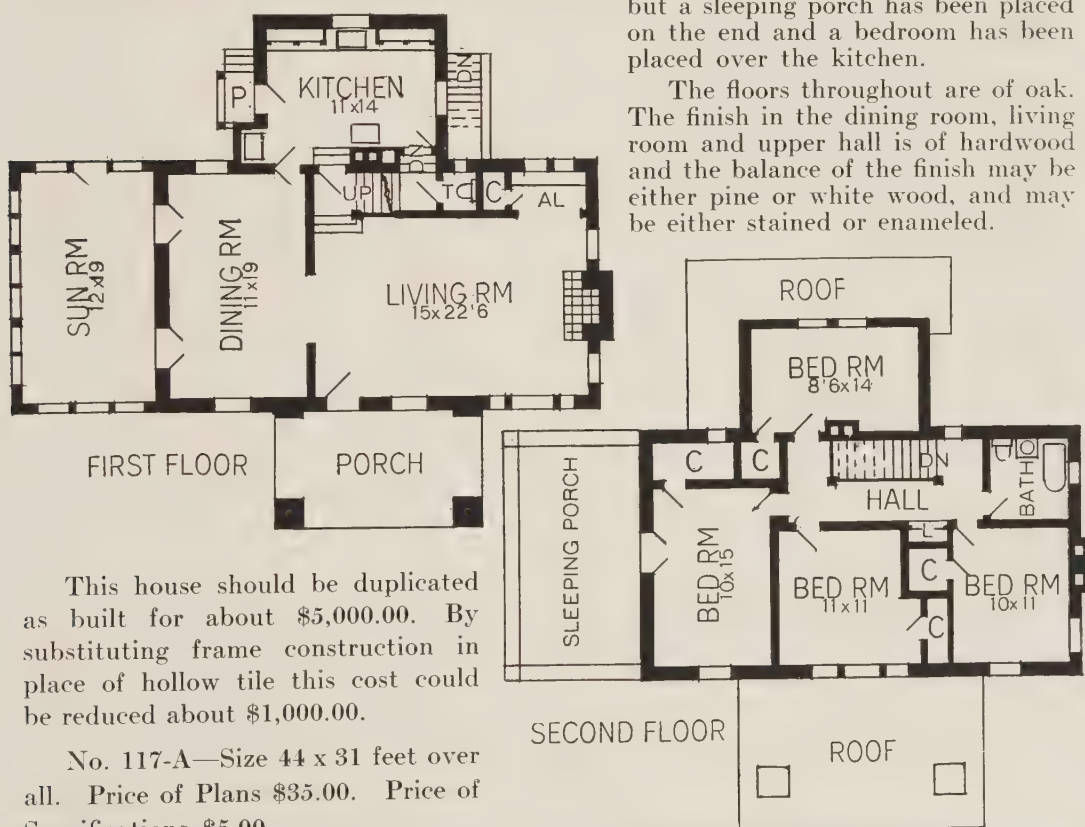




## A DEVELOPMENT OF No. 117

This exterior is a development of our No. 117 and the floor plan has been retained with a sun room added and a revision in the kitchen wing. The location of the dining room and living room, and the general arrangement of the second floor has been kept, but a sleeping porch has been placed on the end and a bedroom has been placed over the kitchen.

The floors throughout are of oak. The finish in the dining room, living room and upper hall is of hardwood and the balance of the finish may be either pine or white wood, and may be either stained or enameled.



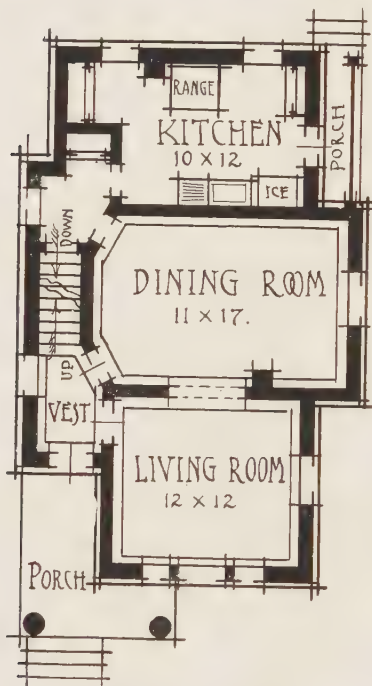
This house should be duplicated as built for about \$5,000.00. By substituting frame construction in place of hollow tile this cost could be reduced about \$1,000.00.

No. 117-A—Size 44 x 31 feet over all. Price of Plans \$35.00. Price of Specifications \$5.00.



### A MODEST COTTAGE

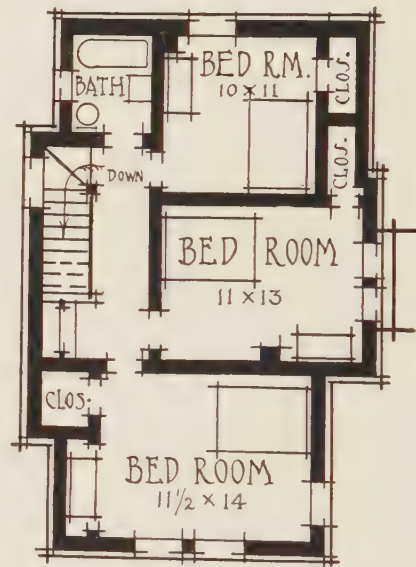
This is a development of a very simple plan. It is artistic and pleasing, but like many typical plans of inexpensive homes proper study of the exterior expression has not always been given. When built according to our plans and specifications this house has all the snap and style of a house of many times its cost. The first story is cement



FIRST FLOOR

over ordinary frame construction, applied on metal lath to prevent cracking; second story is of shingles, stained, with every fourth row doubled, which is an inexpensive method for gaining a desirable effect and making a pleasing exterior.

The plan is so simple, economical and convenient that it requires no explanation. As built the house is heated with stoves, and chimneys so



SECOND FLOOR

located that one can be placed in every room. A hot-air furnace could be installed at slight expense which would avoid the necessity of the front chimney. This would make a comfortable home for the Northern States.

Cost \$1,900.00. Can be built for \$1,700.00 to \$2,400.00.

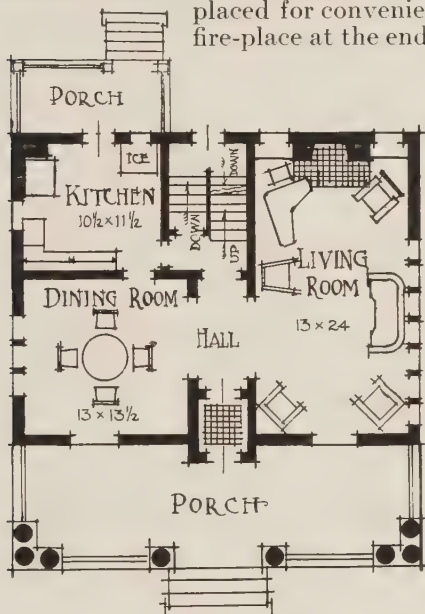
No. 115—Size 21 x 33 feet. Price of Plans \$20.00. Price of Specifications \$5.00.



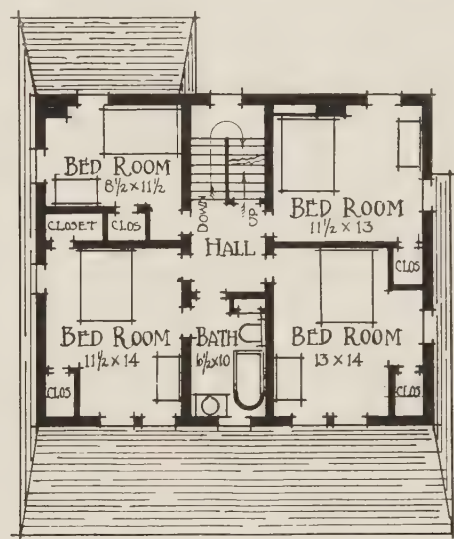


### MODERN DUTCH COLONIAL

This Dutch Colonial Cottage is built with black slate roof, lap siding painted brown, and porch columns, window sash and outside trim painted white. The foundation is faced with red brick from grade line to sill. It would be equally attractive as an all-shingle house. The first floor is planned with a center hall with stairway in the rear, so placed for convenient access from kitchen. The large living room with a fire-place at the end and a row of high windows occupies one entire side



FIRST FLOOR



SECOND FLOOR

of the house, while the kitchen and dining room balance it on the other side. The front door is accessible from the kitchen without entering the living or dining room. The kitchen is conveniently arranged. The second floor has four large bedrooms with closets, bath room, linen closet and stairs to attic.

Cost \$3,800.00. Can be built for from \$3,500.00 to \$4,500.00, depending on local conditions.

No. 102—Size 33 x 25 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

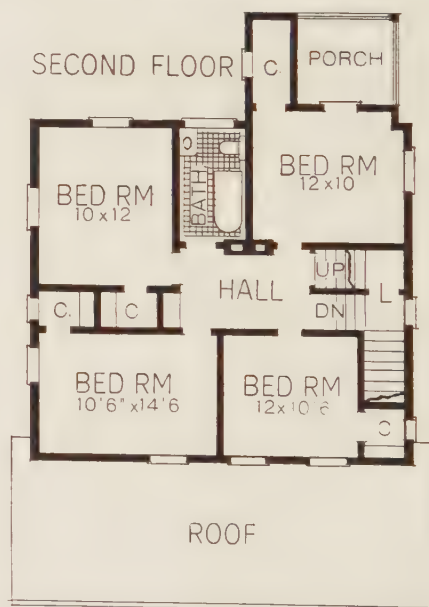
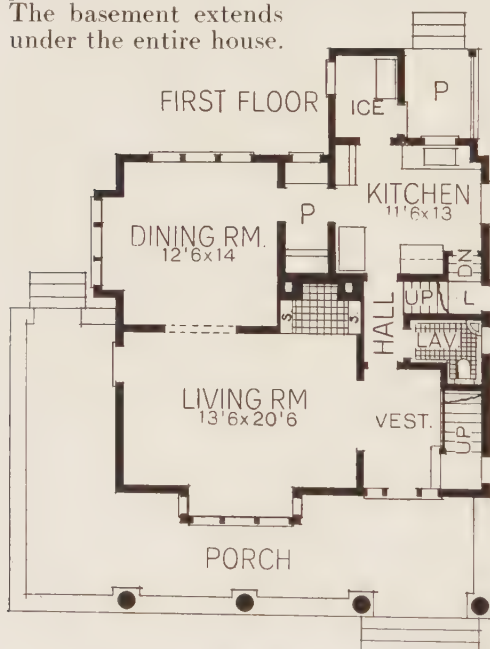
Directions for ordering plans on page 288. For special designs see page 150.



## A MODIFIED SWISS TYPE

A rather unusual combination of wide siding painted white, with vertical boards stained brown, black slate roof, brown trim and white columns, adds to the attractiveness of this design. A part of the porch is covered and the portion at the side open.

The special features of the first floor are the ingle-nook in the corner of the living room and the toilet room under the main stairs. Four bedrooms, bath and sleeping porch are contained on the second floor, and maid's room and large attic on the third. The basement extends under the entire house.



This design has been built for \$4,500.00 and should be built for from \$4,000.00 to \$5,000.00, depending on local conditions.

No. 160—Size 31 x 27 feet. Price of Plans \$35.00. Price of Specifications \$5.00.

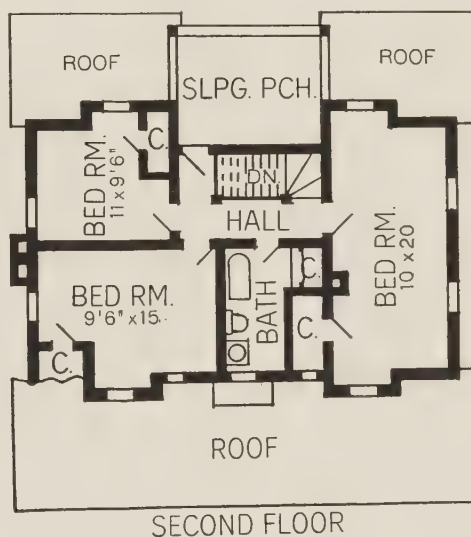
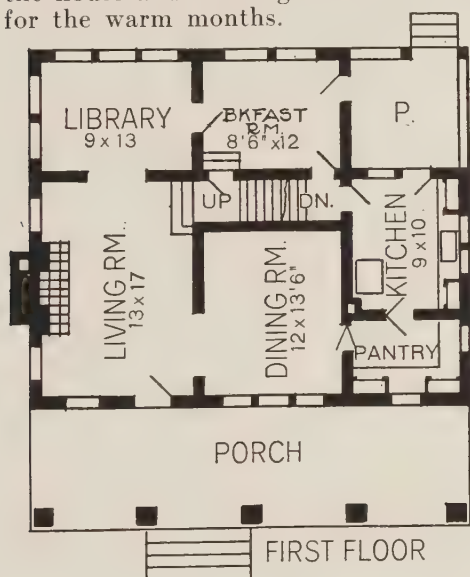
Directions for ordering plans on page 288. For special designs see page 150.





### A DUTCH COLONIAL COTTAGE

Twenty-four-inch shingles are used on the exterior of this old Dutch Colonial Cottage, which, together with the tight shingle barge and simple treatment, accentuates the old fashioned Colonial design. The wide porch extends across the entire front of the house and the large kitchen is enclosed in lattice, making an out-of-door kitchen for the warm months.



The living room and library make practically one room and the dining room also opens into the living room with a wide arch. The kitchen and dining room are connected by a service pantry and the breakfast room or porch makes an attractive feature. The second floor contains three bedrooms, bath and a large sleeping porch; no attic, but basement under main rooms.

This house was built complete except furnace for a little under \$3,000.00. A furnace would cost about \$100.00 more. It should be duplicated for the same sum.

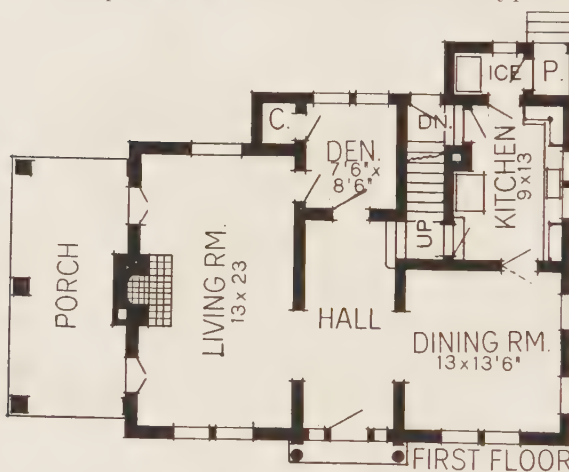
No. 185—Size 36 x 27 feet. Price of Plans \$25.00. Price of Specifications \$5.00.



### A COLONIAL HOUSE

This design is of a pure Colonial type and makes a most attractive home. The exterior is carried out in wide siding and should preferably be all white with green shingle roof and red brick chimney.

The plan is of the usual center hall type and considerable saving is effected by the

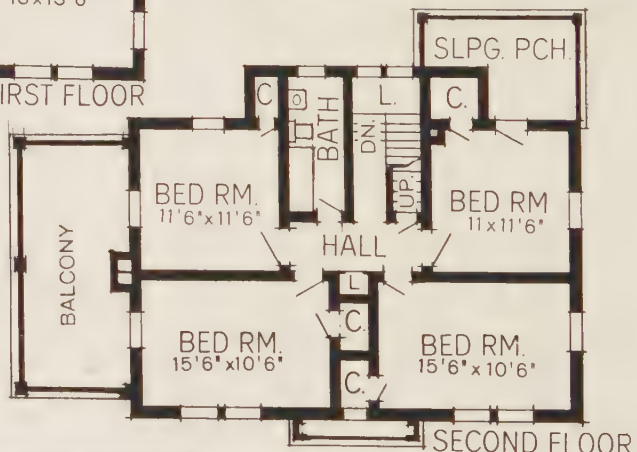


enclosed stairway, which permits a small den or library at the rear of the hall. The living room occupies one entire side of the house, is well lighted, and with the porch at the side makes a most attractive room. The dining room and kitchen occupy the other side, and the kitchen contains ample space for complete kitchen equipment and cupboard. The second floor contains four large bedrooms and bath, with ample closets off of each room.

and a linen closet. Two additional rooms can be placed in the attic if desired. Basement under the entire house.

This design can be built under ordinary conditions for about \$4,000.00.

No. 222—Size 36 x 28 feet. Price of Plans \$35.00. Price of Specifications \$5.00.

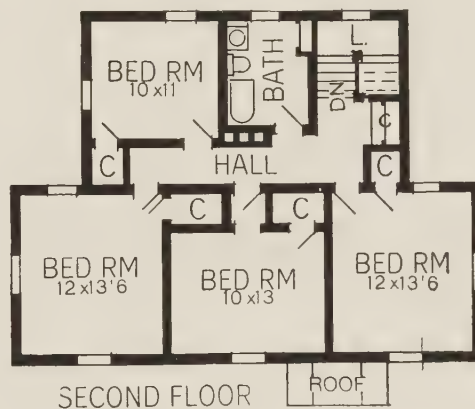
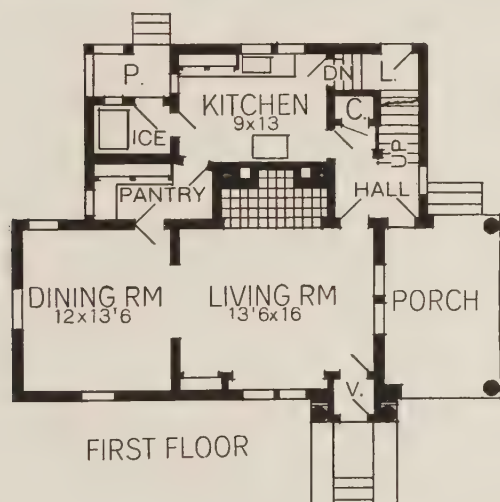






## AN ARTISTIC DESIGN

This is a most attractive design of a small house for a wide lot. The exterior is carried out in wide siding or large shingles and the roof can be covered with either shingles or slate. If climatic conditions permit the exterior would look best in large shingles stained gray with white trim and the roof in gray or green shingles.



The living room is large with an attractive ingle-nook and is connected with the dining room by a wide cased opening. A serving pantry connects the kitchen and dining room and the refrigerator is placed in a separate cold room. One chimney carries the furnace, fireplace and kitchen flues, which is quite a saving in expense. As the hall is separated from the living room no rear stairs are necessary. The second floor contains four bedrooms. The bathroom is placed over the kitchen and is conveniently located in reference to all of the bedrooms and the first floor.

This house could be built under ordinary conditions for about \$4,500.00, but this cost would depend on the elaboration of detail as well as local prices.

No. 207—Size 38 x 28 feet. Price of Plans \$40.00. Price of Specifications \$5.00.

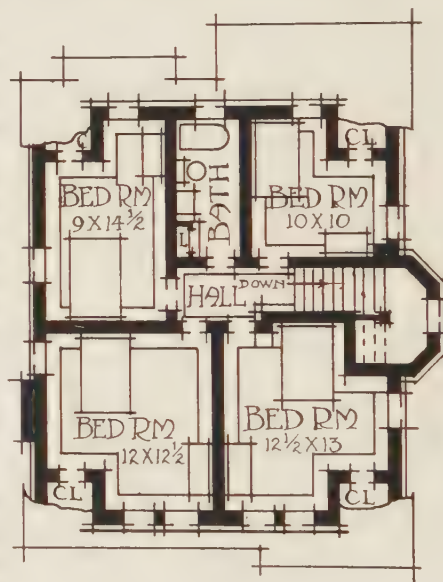
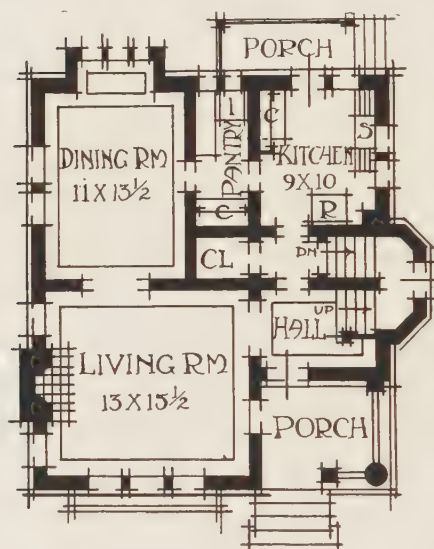


### AN AMERICAN COTTAGE

A unique and exceedingly effective treatment for a purely American cottage. This home is constructed of frame and is sided to the top of the first story windows and in the dormers with wide siding. Ordinary siding with each third board doubled would give an equally pleasing effect. The gable ends are sided with 10-inch boards placed

upright with battens over the joints. The roof is shingled. The color treatment is white upon the first story and dormer, brown stain in the gable end, and the shingles are allowed to take on their natural gray tone, or stained gray.

A glance at the floor plan will show the completeness



and compactness of the entire house. It has everything that is to be found in a large house. The bedrooms and hall are well lighted, the bathroom is convenient and the closets are ample. This home has no attic, but the basement extends under the entire building.

Cost \$2,800.00 under normal building conditions. In localities where cost of building is high this cost might increase to \$3,500.00. As a summer cottage this design should be built for about \$1,500.00.

No. 134—Size 26 x 28 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

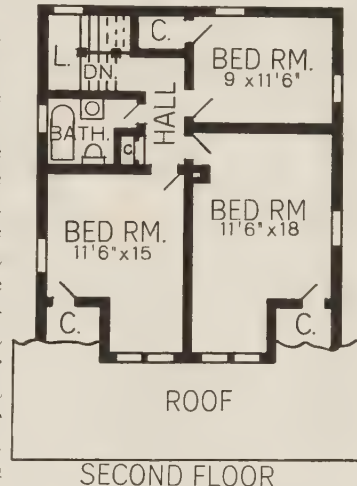
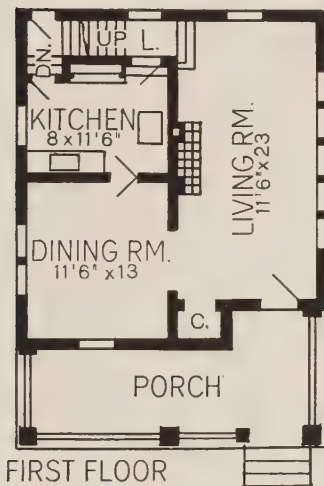




## AN ARTISTIC DESIGN

The artistic effect of this design is enhanced by the lattice work carried over the row of small windows in the living room and this effect would be further enhanced if vines were growing over this lattice. The exterior is carried out in a very simple way with the main roof extending over the porch and supported by heavy columns.

Considerable space is gained on the first floor by placing the stairway at the rear of the kitchen, thereby giving one entire side of the house to the living room. The combination stairs take up very little space and the outside entry is combined with the grade entry to the basement, which effects a further saving in space. The second floor contains two unusually large bedrooms for a house of this size, a smaller bedroom, and in addition a good size bathroom and large closets for each bedroom. The first floor is finished in oak and the second floor in



yellow pine, all stained and varnished. The floors are oak throughout. Basement under entire house. The attic is unfinished and is reached through scuttle in ceiling of second floor hall. We have had most favorable criticisms of this design wherever built.

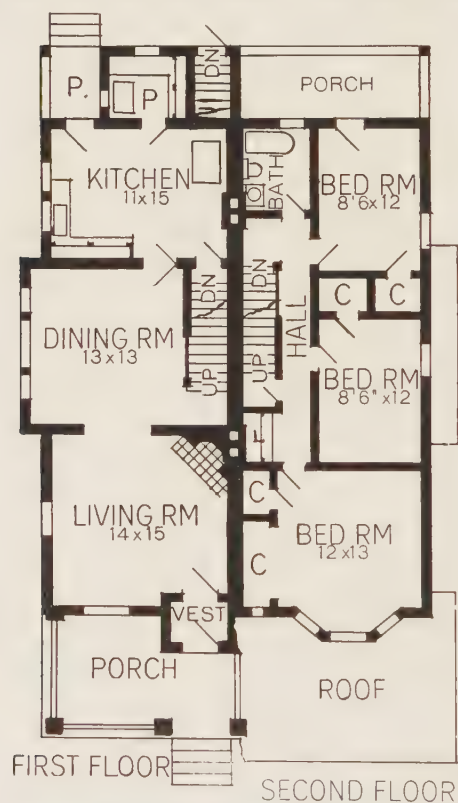
This house has been built for \$2,000.00 and should be duplicated under ordinary conditions for the same amount. Built under expensive conditions the cost might run to \$2,400.00.

No. 168—Size 24 x 28 feet. Price of Plans \$20.00. Price of Specifications \$5.00.



### AN INEXPENSIVE DOUBLE HOUSE

While no money has been wasted on this design in expensive detail, the general effect is pleasing. As a double house is, as a rule, an investment proposition, stock material is used throughout to reduce the cost and the result is a house of sufficient size for two families at a cost which will make an attractive investment anywhere.



The living room is entered through a vestibule and contains an attractive fireplace, and is connected with the dining room by a wide cased opening. The kitchen is large and contains complete equipment with a large pantry at the rear. The stairs lead up from the dining room and the second floor contains three good sized bedrooms and bath, with large closets. The third floor can be divided into two additional bedrooms, if desired, and a large balcony or sleeping porch is placed over the rear porch and pantry. There is an outside grade entrance to the basements, which extend under the entire house, and contain heating plants and laundry equipment for each house. The finish is yellow pine, stained and varnished throughout. Floors on first floor are of oak, on second floor of rift-sawn yellow pine. In localities where other woods such as cypress, red wood or gum are cheaper they should be substituted for the yellow pine finish.

This house could be built for about \$5,000.00 in most localities.

No. 201—Size 32 x 40 feet. Price of Plans \$20.00. Price of Specifications \$5.00.

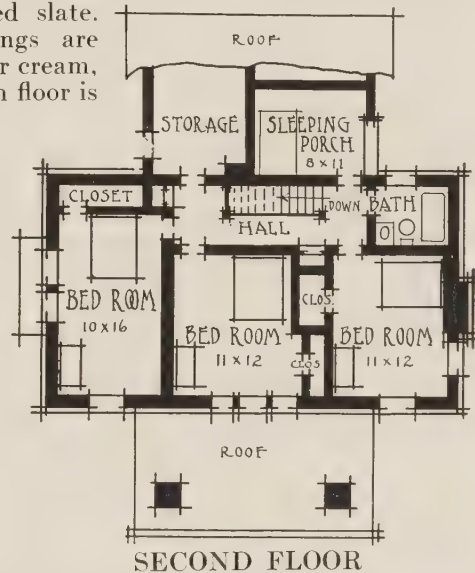
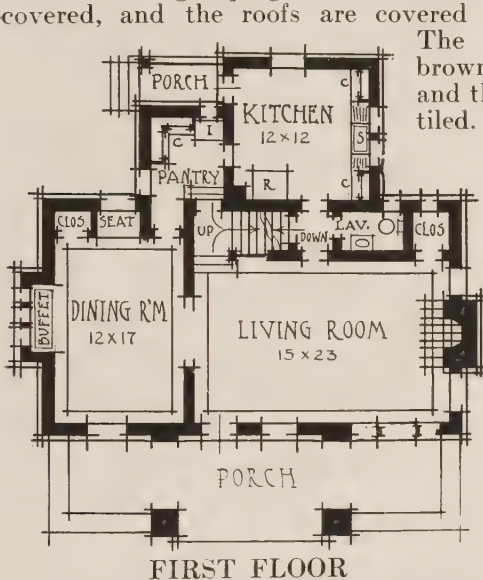




### AN AMERICAN HOME

A cement house, typical of our best modern architecture and, like the other cement houses shown, is built of hollow tile. The beauty of the exterior is due to the unbroken roof lines, the grouping of the windows and the massive chimney. The porch is partly covered, and the roofs are covered with red slate.

The trimmings are brown, plaster cream, and the porch floor is tiled.



By the elimination of the hall we have an unusually large living room, a good-sized dining room, a lavatory and two spacious closets on the main floor. The kitchen and pantry are placed in a wing, which insures against odors of cooking penetrating the rest of the house. Stairway to basement is accessible from both living room and kitchen. The second floor has three bedrooms, each with a good closet, and a sleeping porch. To gain the long low effect to the exterior no attic is provided, as there is ample storage space in the wing at left of sleeping porch. This is an exceptionally good plan and merits careful consideration as it combines a high degree of comfort with most excellent architectural effect.

Cost \$4,000.00. Can be built for from \$3,300.00 to \$5,000.00.

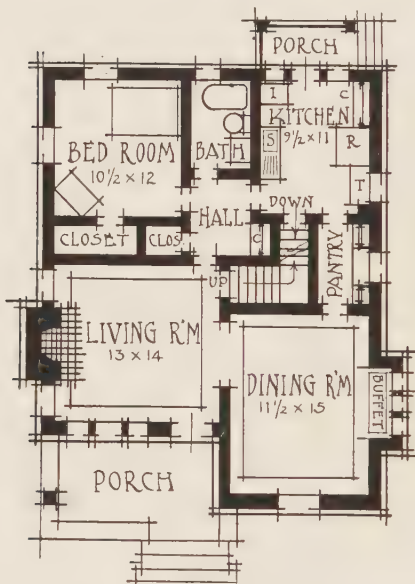
No. 117—Size 36 x 32 feet. Price of Plans \$30.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.

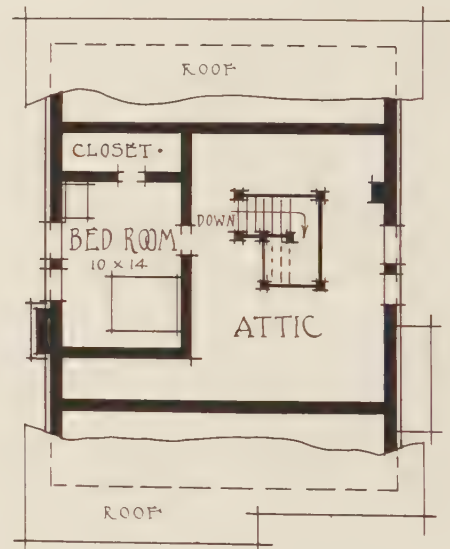


### A FIVE-ROOM BUNGALOW

A delightful little bungalow with resawn lap-siding, shingle roof and a rough brick chimney. Walls and roof are stained brown, the trimmings and sash are painted white. Full of character; a very desirable home. The exterior will lend itself to several pleasing color combinations.



FIRST FLOOR



SECOND FLOOR

The plan contemplated but one bedroom on the first floor and one on the second; a third bedroom can be provided by building out a dormer in the front, or preferably in the rear, as an unbroken roof-line is desirable in a bungalow. The plan is complete in all its details. On the small scale used it is difficult to show all the features provided for on the working drawings, and lack of space permits the briefest description only.

This plan is carried in 28 and 30-foot widths at same prices. Please mention width desired in ordering.

Cost \$2,100.00, with basement, plumbing and complete heating plant. As a summer cottage could be built for about \$1,000.00.

No. 136—Size 27 x 34 feet. Price of Plans \$20.00. Price of Specifications \$5.00.

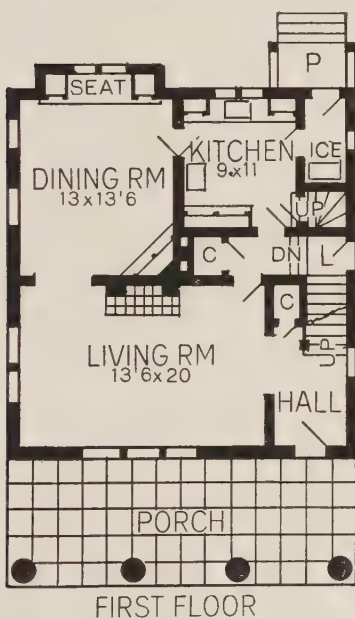
Directions for ordering plans on page 288. For special designs see page 150.





### LARGE SHINGLES AND TILE

A very unusual combination of large shingles on the side walls and tile on the roof is used on this design. Otherwise the exterior and plan are very similar to our No. 175, except that the porch is placed across the front, the vestibule is omitted and kitchen and refrigerator room are contained within the square of the house.



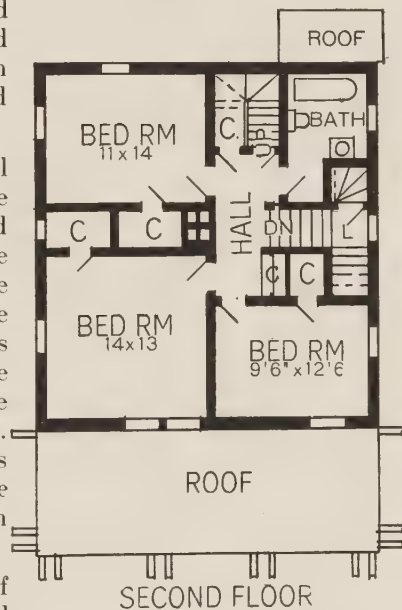
Three bedrooms and bath occupy the second floor, and a maid's room is located on the third floor.

The living room, hall and dining room are finished in oak, stained brown and waxed. The kitchen is in yellow pine and bedrooms in white enamel with birch doors stained mahogany. The floors except kitchen are oak, waxed and polished. The bathroom floor is tiled, with tile cove base and walls finished in Keene's Cement.

A square design of this type is economical

to build, and all flues being carried in one chimney also reduces the cost which should run from \$3,300.00 to \$3,800.00.

No. 181—Size 28 x 28 feet. Price of Plans \$30.00. Price of Specifications \$5.00.

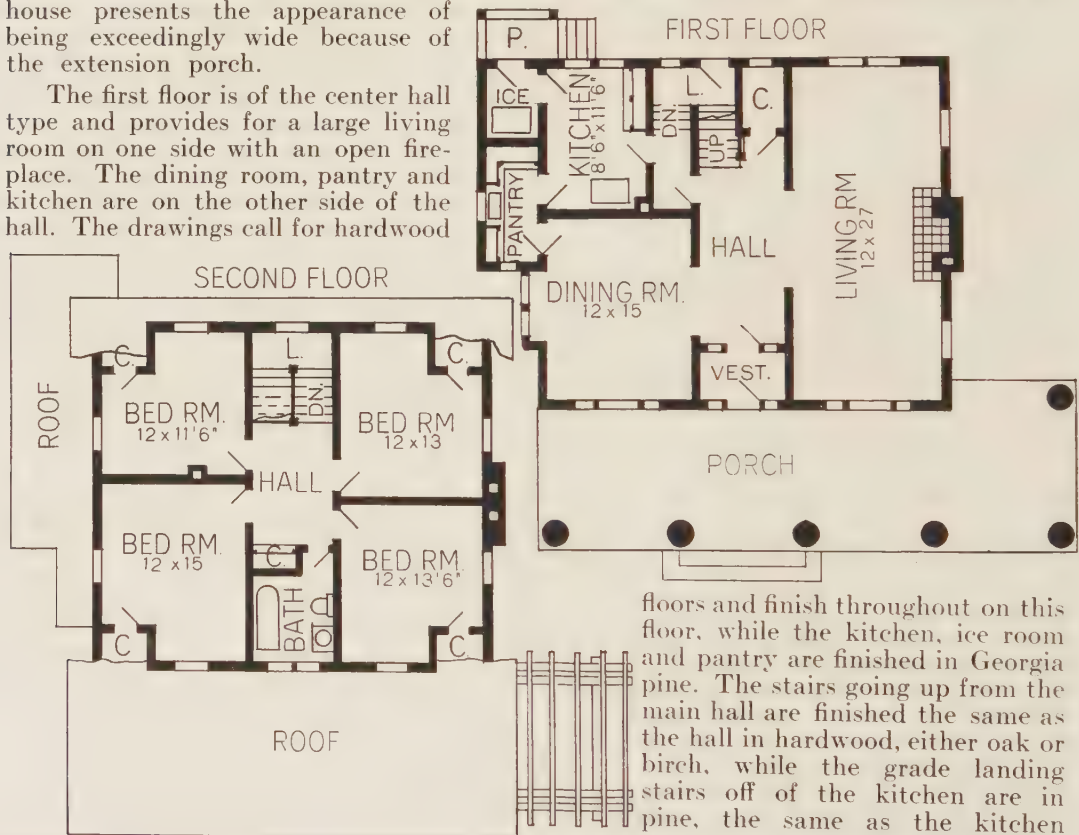




### A MODIFIED DUTCH COLONIAL

In this design the porch has been extended out to one side with an open pergola on the extension portion. The general effect of the Dutch Colonial is, however, preserved. The chimney is exposed on one side of the house and viewed from that side the house presents the appearance of being exceedingly wide because of the extension porch.

The first floor is of the center hall type and provides for a large living room on one side with an open fireplace. The dining room, pantry and kitchen are on the other side of the hall. The drawings call for hardwood





finish. The stairs going to the basement are open plank stairs. The second floor having four large bedrooms, each with a closet under the roof, can be finished to suit the desire of the purchaser, but hardwood floors are provided on the drawings as well as in the bathroom, which is over the vestibule.

The side walls of the house are covered with wide lap siding in preference to any other material and the roof is covered with black slate.

This design should be built for about \$4,000.00 in most localities.

No. 218—Size 32 x 28 feet. Price of Plans \$35.00. Price of Specifications \$5.00.



### A SMALL SIX-ROOM HOUSE

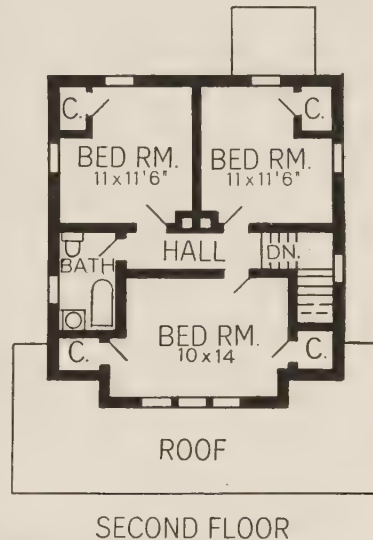
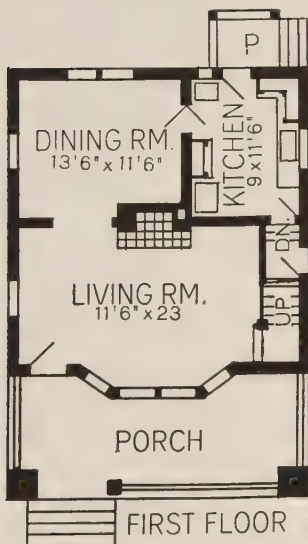
The exterior of this house is carried out in ordinary lap siding up to the sills of the second floor windows and above this point shingles have been used, which are stained brown and the siding is painted white as is also all of the trimming. The foundation is built of concrete block and the roof is of slate. The house is distinctive in character

gained by the hip roof on the porch and by the hip roof feature over the central bay on the front.

The general plan is very similar to No. 165 and shows the wide variation of exteriors possible with a single type of plan. A number of houses may have the same floor plan and yet look entirely different to a passerby.

This house could be built for \$2,000.00 under average conditions. In no event should the cost exceed \$2,500.00.

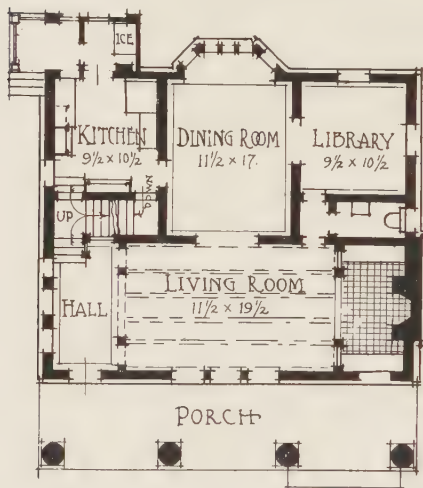
No. 167—Size 24 x 24 feet. Price of Plans \$20.00. Price of Specifications \$5.00



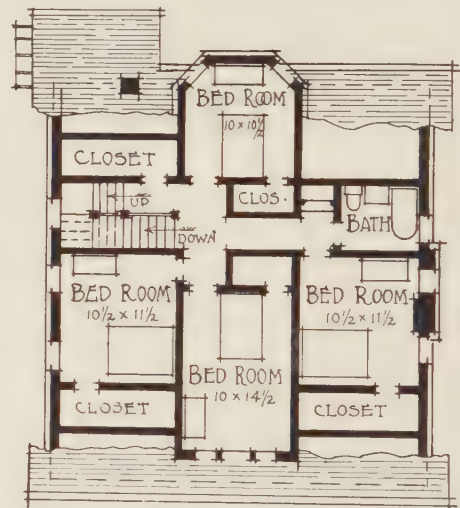


### A CEMENT COTTAGE

This is a cement house with walls constructed of hollow tile or brick. The simple treatment of the roof with the pleasing grouping of windows give this house a decidedly homelike effect. The same character, however, would be kept at less expense if wood frame were used, with the walls clapboarded or shingled. The railing indicated on the kitchen porch is composed of  $\frac{7}{8}$  sawed boards, a departure cheaper than spindles with a great deal more character.



FIRST FLOOR



SECOND FLOOR

The large living room across the front with the entrance hall at one end and an angle-nook with chimney seats at the other, a combined width of 33 feet, and the dining room opening off the center of the living room give a feeling of great space and the effect of an exceedingly large house. The library is accessible from either the dining room or living room with a toilet room conveniently placed. Combination stairs lead to the second floor, which contains four bedrooms, a closet for each room, large storage closet and bathroom. One or two bedrooms can be finished off in the attic if desired. Basement under entire house.

Cost \$3,800.00. Can be built for from \$3,000.00 to \$5,000.00.

No. 106—Size 34 x 27 feet. Price of plans \$25.00. Price of Specifications \$5.00.

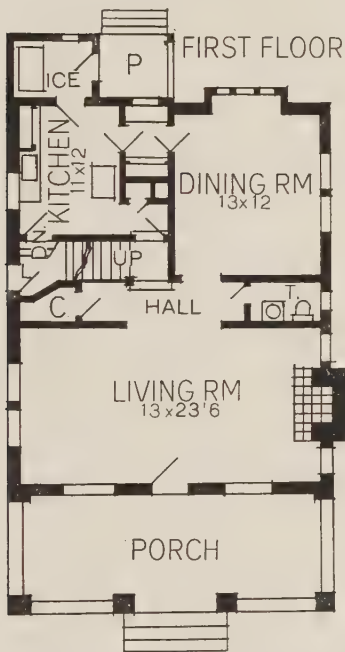




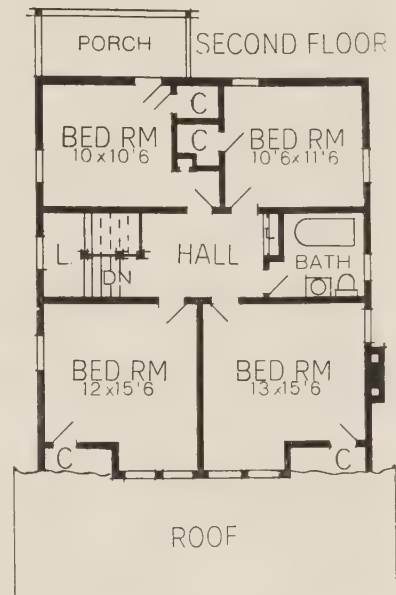
### A BRICK AND STUCCO HOME

In this design the first story is carried out in rough brick and the second story is stucco on metal lath. The general design conforms to the prevailing bungalow type with none of the extreme features usually associated with the bungalow design.

The first floor plan is unique in that a little hall or passage way is provided between



the living room and dining room, thereby making room for a first floor toilet room and a coat closet. The living room extends across the entire front of the house and a serving pantry is provided between the kitchen and dining room. Combination stairs lead to the second floor and the basement is reached from the kitchen by a grade entrance underneath the main stairs. The second floor contains four bedrooms with ample closets, large bath-room with linen closet and a clothes chute to the basement.



This design could be built in most sections for about \$4,500.00. Built under most expensive conditions in a large city the cost ran slightly under \$5,000.00.

No. 221—Size 26½ x 32½ feet. Price of Plans \$40.00. Price of Specifications \$5.00.



### AN "L" SHAPED HOUSE

This "L" shaped home with an entry bay placed at the re-entrant angle is typical of English homes and is eminently practicable for our climate. To take advantage of every ray of the life giving sun, this home was planned and built. The walls are brick up to the top of the first floor windows and

cemented above; the roof is slated and the wood-work is stained and waxed. The earth is terraced up between the wings and surrounded by a low hedge. Being on a level with the porch floor this

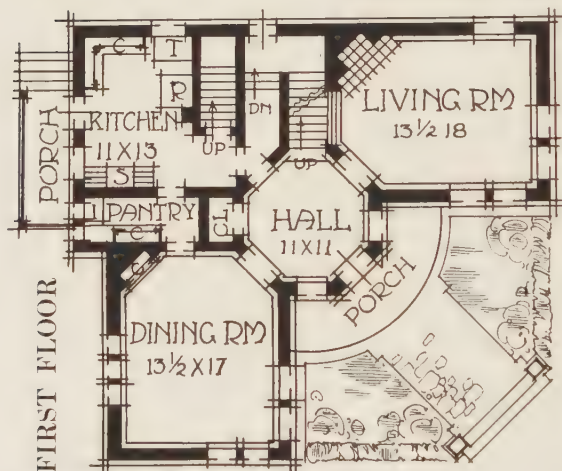
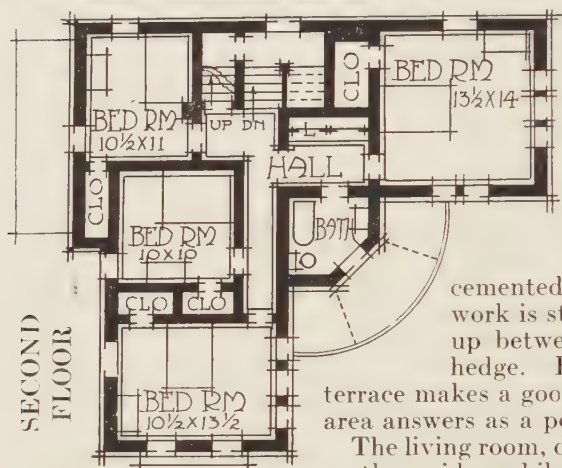
terrace makes a good romping place for children. The entire area answers as a porch.

The living room, dining room and two bed rooms have light on three sides, while the kitchen and bedroom over have light

on two sides. Combination stairs lead to second floor, attic and basement from both the hall and kitchen and a grade entrance is provided to the basement. A corner fire-place in the living room, a china cabinet in the dining room and the large octagonal hall make this a much sought and desirable plan. Note the coat closet off of the main hall on the first floor, the large linen closet in the second floor hall and the large closets provided off the bedrooms. Kitchen and pantry arrangements are good and the whole plan is thoroughly studied.

Cost \$5,200.00. Minimum cost \$4,500.00; maximum \$6,500.00.

No. 141—Size 36 x 40 feet. Price of Plans \$40.00. Price of Specifications \$7.50.

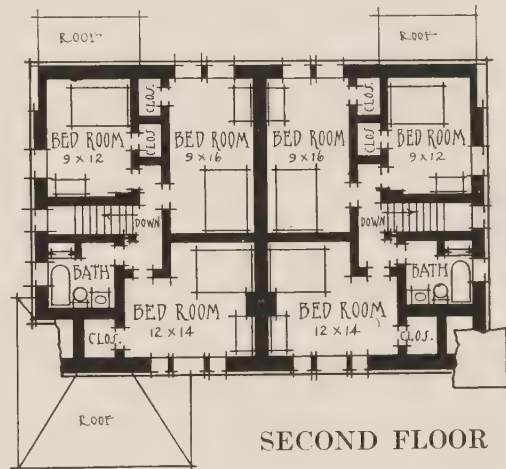
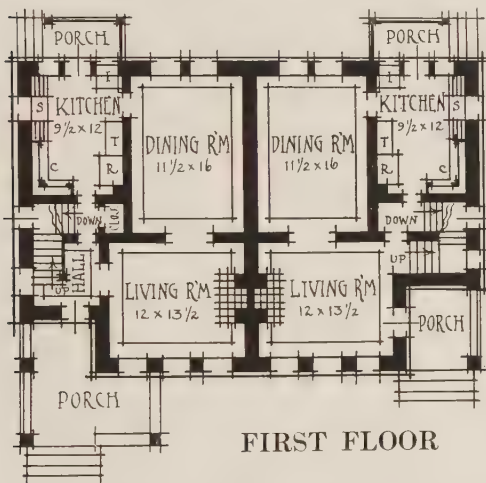






### ENGLISH COTTAGES

A pair of cottages carried out after the modern English style of architecture, constructed of hollow tile and cemented above the basement around the entire exterior. The basement wall above grade is laid up of red brick and white mortar. The grouping of gables and windows gives this house character, seldom if ever, seen in two attached houses.

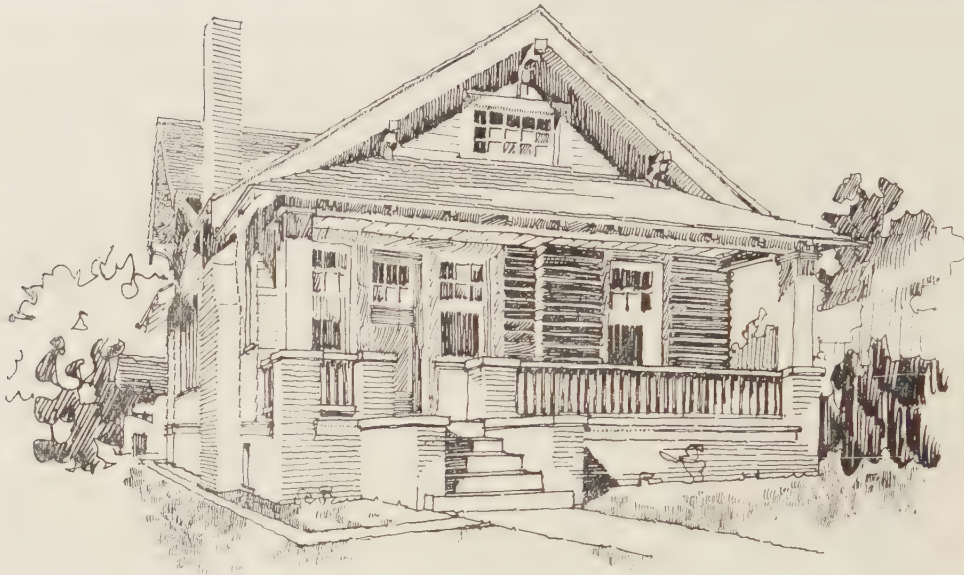


Each cottage contains a hall, living room, dining room, three bedrooms and a bath, a convenient place for wraps on the first story, and a large closet for each bedroom. There is nothing crowded about this plan and each cottage is as separate and distinct as if built by itself. The porches could be arranged on both sides alike, either projecting or receding, and while a receding porch is best for the exterior effect, the projecting porch is somewhat larger. The houses could be built either way. A double house is somewhat cheaper to build than two single houses of equal floor area and, of course, is a more desirable investment.

Cost \$4,700.00. Can be built for from \$4,200.00 to \$6,500.00, depending on local conditions.

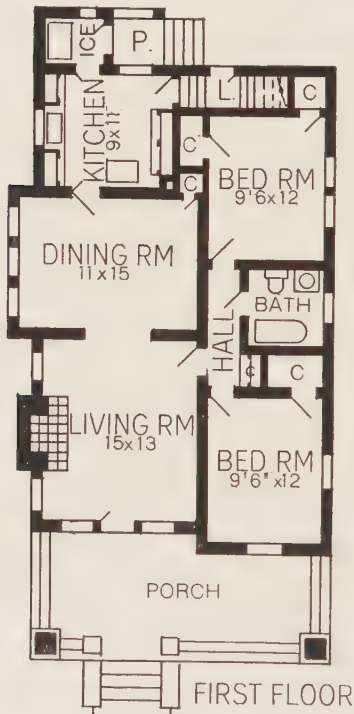
No. 120—Size 45 x 30 feet. Price of Plans \$35.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.



### A FIVE-ROOM BUNGALOW

In this bungalow the foundation, porch piers and chimney are built of chocolate brick and the siding is ordinary siding painted a warm brown and the shingles are stained brown. The arrangement of the porch across the front in connection with the main roof lines presents a pleasing and home like appearance.



The gables have windows lighting the attic space, which is reached through a manhole in the connecting hall between the bedrooms. This manhole has a balanced stairway that is let down from the ceiling, in which way storage space in the attic is of easy access and use.

The first floor provides for six rooms and a bath, with entrance to the sleeping quarters off the living room. The dining room opens off of the living room, and the kitchen is located at the rear of the house with grade landing, stairs to cellar, ice room and kitchen porch.

The chimney to the fireplace on the side wall of the living room is exposed and adds greatly to the effect of the exterior.

A bungalow of this size and design can be built, with basement, heating plant and complete equipment for a northern climate for from \$2,500.00 to \$3,000.00. As built in the South and West it would cost considerably less.

No. 195—Size 24 x 37 feet. Price of Plans \$20.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.





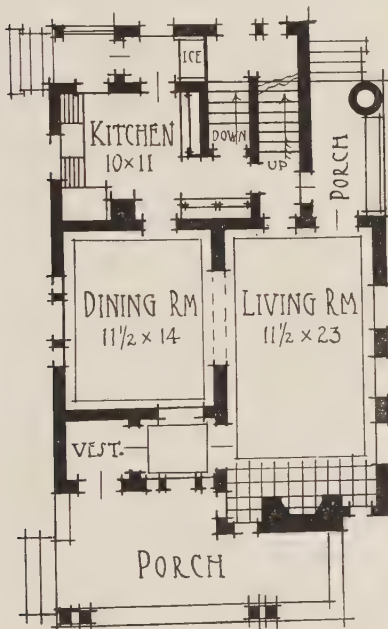
### AN ENLARGEMENT OF No. 105

An English type of residence similar in treatment to No. 105, but somewhat enlarged and with a spacious front porch. The grade line is terraced up to the level of the porch floor and slopes down in the rear to allow full height basement windows.

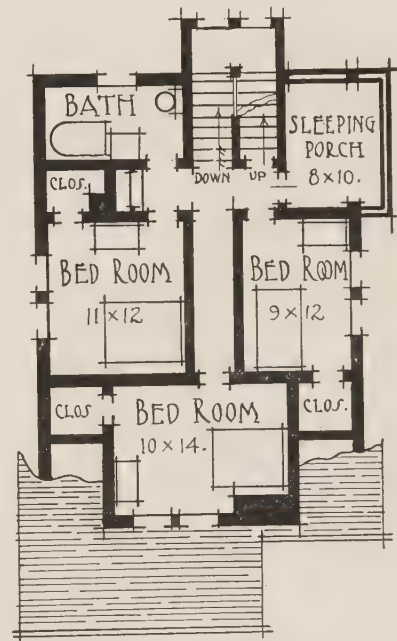
The floor plan is a development of the same fundamental idea as Nos.

104 and 105. In addition to the features mentioned for those plans it has a large sleeping porch off the stair hall on the second floor and direct access to the front bedroom through this hall.

The chimney and foundation, together with the porch parapet walls are built of red shale brick and combined with the brown staining and the white trim makes a very attractive residence.



FIRST FLOOR



SECOND FLOOR

Cost \$2,900.00. Can be built for \$1,500.00 as a summer cottage. Under expensive building conditions the cost should not exceed \$3,500.00 when built for all the year round use.

No. 108—Size 24 x 36 feet. Price of Plans \$27.50. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.



### A PHYSICIAN'S RESIDENCE

Gray mottled brick, with half timber work above, and tile roof, are the materials used on the exterior, which with the novel feature of a garage with sun room over, give this house unusual character.

The house was designed to meet the needs of a physician with consulting room in his residence, with separate outside entrance to this office, and access to garage

through rear entry from both office and living portions of the house.

The main rooms are laid out in a conventional manner with the addition of a bedroom and toilet room on the first floor, and three bedrooms, sewing room, bath, sleeping porch and storage room on the second floor. The sun room over the garage adds very little to the expense and makes a most attractive feature.



This design should be built for from \$7,000.00 to \$8,000.00, including garage.  
No. 183—Size 44 x 40 feet. Price of Plans \$50.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.

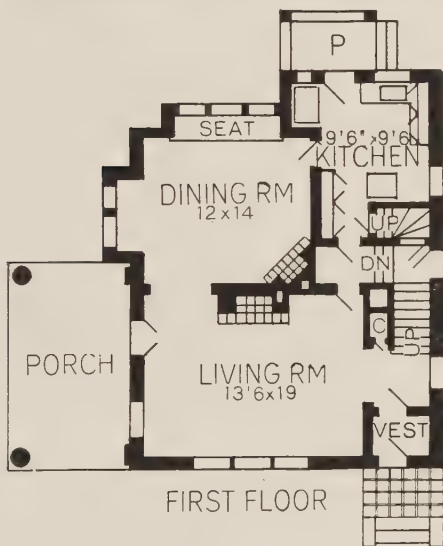




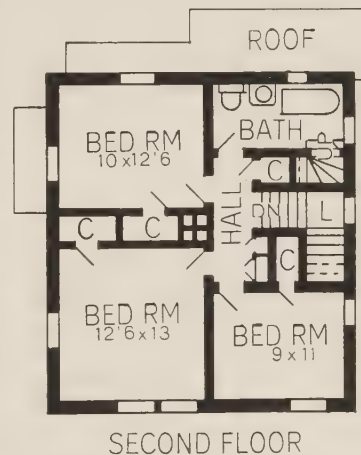
### A SMALL COLONIAL HOUSE

A small frame house, built with wide siding on wood frame and is very artistic by reason of the porch on the side, with a neatly designed entrance hood on the front. The color scheme of this house is all white with the roof in green shingles.

The floor plans provide for a six room house and all of the important features have been preserved, as for instance, the grade landing to the basement from the outside



and the combination stairway from the living room and kitchen. The attic space, which is lighted from the rear of this house, is reached by a stairway from the bath-room. An economical feature of this house is the single chimney in the center, which provides for a fireplace in the living room and a corner fireplace in the dining



room. The kitchen range is also connected with this chimney. A seat is built in the dining room and special space for buffet provided. Bed rooms have large closets, and linen closets, coat closets and clothes chute are provided. This house has been built for \$3100; can be built for from \$2900 to \$3600, depending on conditions.

No. 175—Size 25 x 32 feet. Price of Plans \$25.00. Price of Specifications \$5.00

Directions for ordering plans on page 288. For special designs see page 150.



### AN ENGLISH CEMENT AND HALF TIMBER HOME

To properly describe this quaint development of an old thatched roof cottage at Broomfield it becomes necessary to say a word concerning the growth of style in architecture. From the beginning until this day builders have been improving and modifying the architecture that has gone before. As the periods passed, each left examples of an art typifying the prevailing life, temperament, climate and politics of its time. So the periods came, developed and declined and out of each decadence grew another period. These periods of styles were far reaching to the extent of prevailing over the entire civilized world; and at the present day is the very same occurrence going on before us—we are developing an architecture out of the past. If the reader will note the numerous replicas of old work, or developments of the old styles, he can see that in architecture, history is again repeating itself. The much sought for half timber work of England, the free use of the wide ship-lap siding of our forefathers in the Colonial days, the use of stucco or cement walls, also of old England, and even the use of brick work and terra cotta as of the old Romans, all prove the above words.

When an old type is followed and properly carried out, true art value is everywhere apparent. When the architectural mass or some line or detail of the old work is reproduced and incorporated in a modern home, or any other building, the sweet charm, reposeful solidity, and general fitness of things, which we call "Character," is predominant.

The illustrations from a photograph of the old Broomfield Cottage, our sketch of the exterior from our plans, and a photograph of the completed house, from these plans, show how we have caught the spirit of the old work, and how our plans produced practically a replica of the old cottage. While retaining the quaint design we have worked out a plan which meets all modern requirements and makes a most convenient and homelike home. Various modifications, to meet individual requirements, can be





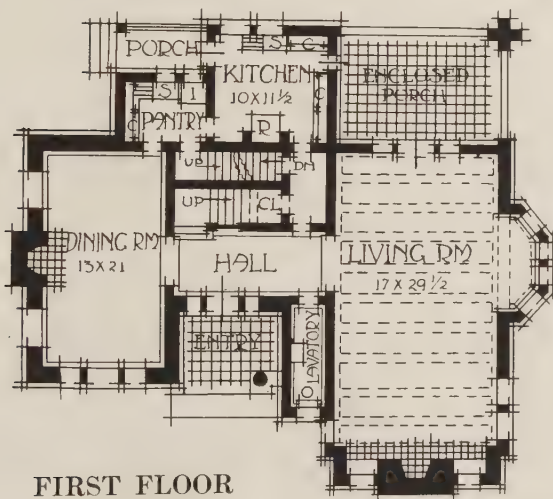
Old cottage at Broomfield

in the summer, having direct access to the kitchen for serving purposes, and can be used as a spacious sun parlor during the winter. The living room has a large fireplace in a tiled recess, flanked by window seats. The service part of the house is very complete and contains all the equipment needed for kitchen use. The range is set in a bricked recess with an extending hood, connected to a ventilating flue. Each of the three bedrooms has some especially attractive feature; a fireplace in the front room, the large bay in the rear room and a complete toilet room off the chamber over the dining room. The main bath has a tile floor and wainscot and elaborate plumbing fixtures. The servant's room, with complete bath is located over the kitchen and is reached by separate rear stairs. These stairs have a door to the main hall at the landing level, giving access between servant's and main bedrooms. There is no attic but storage space under the roof is accessible and a basement extends under the entire house.

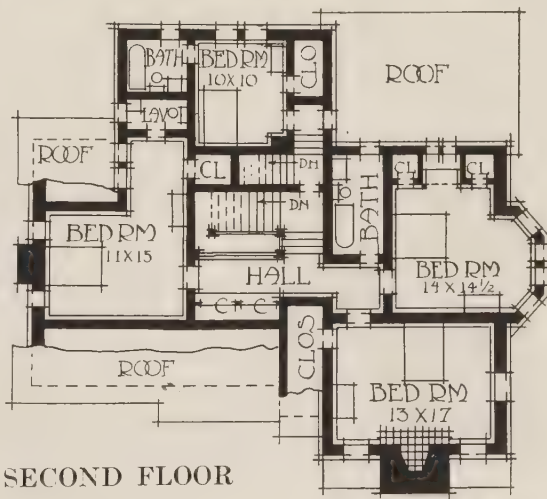
This design should be built for from \$8,500.00 to \$15,000.00, depending on kind and quality of materials used, elaboration of detail, local conditions, etc. We will be pleased to submit estimates of cost, or to answer inquiries concerning this, or other designs illustrated.



Our Sketch of No. 142



FIRST FLOOR



SECOND FLOOR

No. 142—Size 48 x 44 feet. Price of Plans \$90.00. Price of Specifications \$10.00.

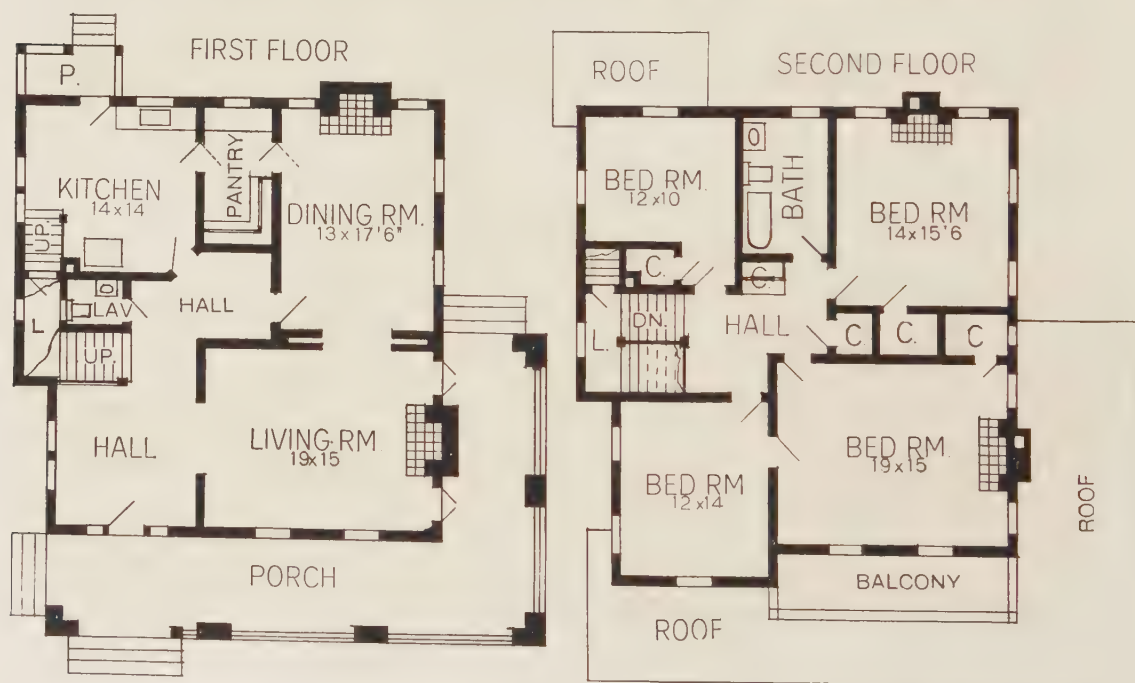


### A SWISS RESIDENCE

This design, while carried out with ordinary siding for the lower story and shingles above, is an example of the Swiss type of architecture carried out in the more ordinary and less expensive materials. There is no basement provided and the house is consequently set on piers. The lattice work between these piers as also the porch railings and the balcony rail are carried out in sawed boards and the roof, having broad overhangs

supported with sawed brackets, adds to the Swiss effect and at the same time shelters the house walls and windows.

The first floor has a large entry hall, off of which connection is made to the kitchen, dining room and living room. The pantry is placed between the kitchen and dining room and a kitchen porch is provided on the back. The front porch extends across the entire front and about half way on the side of the house. A lavatory under the main stairs is placed off the hall and the second floor is reached by a combination stairway, both from the hall and kitchen. Four bedrooms are provided on the second floor with bath, each with ample closets. No attic is provided in this house as built.



Directions for ordering plans on page 288. For special designs see page 150.





View through opening from living room to hall in No. 163

As built this residence cost \$4,500.00, with high grade material and workmanship. It could be built for less in some localities.

With basement, heating plant and complete equipment for a cold climate it should be built for about \$6,000.00.

No. 163—Size  $37\frac{1}{2}$  x 35 feet. Price of Plans \$50.00. Price of Specifications \$5.00.



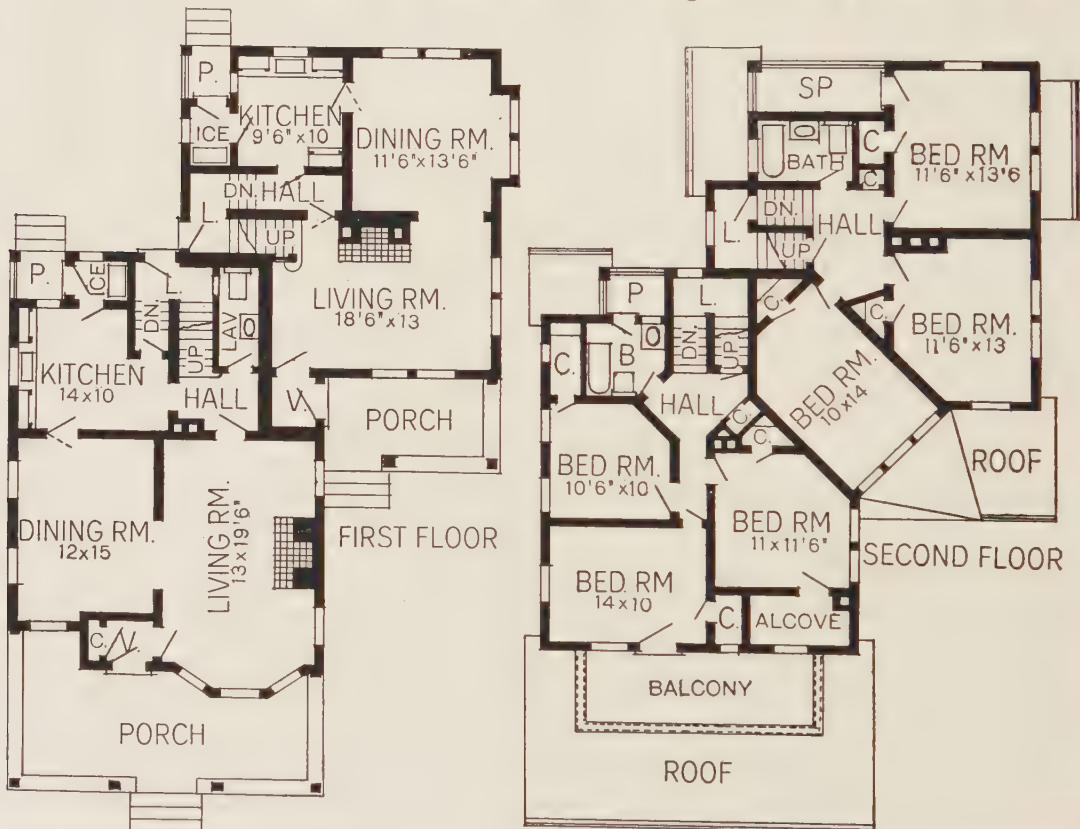
No. 118 as built in Ohio. For floor plans see page 196.

Directions for ordering plans on page 288. For special designs see page 150.



### A UNIQUE DOUBLE RESIDENCE

This double residence occupies a corner lot and has been designed to keep an effect of unity in the general mass and to obviate the general stereotyped design usually found in investment properties. The expense has been no greater than would have been



Directions for ordering plans on page 288. For special designs see page 150.

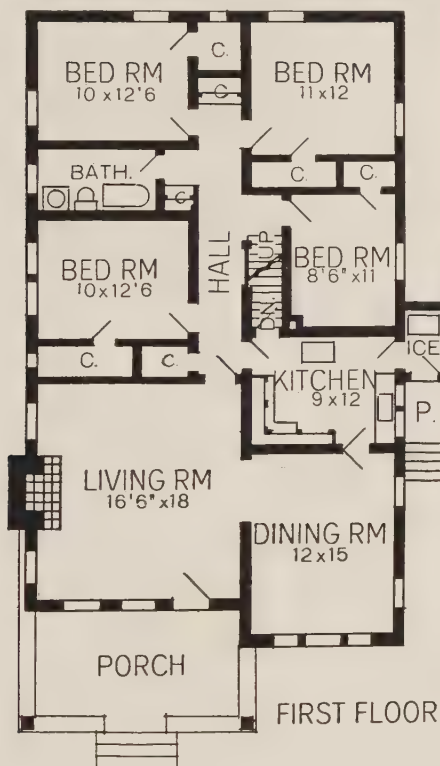


incurred had the home been built without the aid of architects' plans and the effect has been gratifying, and has received very favorable comment from many of our customers. The investment is enhanced by virtue of the fact that the renting public are drawn by a well designed structure, a fact which has been proven many times where the "ordinary place for rent" has been forsaken for one that possesses style and character.

The first floor plan provides for both houses really facing the same street, while the dining room and living room of each house are on the front. The living room of the rear house is favored with a front street exposure and a side street exposure as well, as also the porch for this rear house. It will be noted that each house has all the features of any well designed home, having access to the front doors from kitchens, grade landing stairs, easy access to the second floor from the kitchens and from the living rooms, ice rooms, kitchen porches and each separated in a way that neither will become a nuisance to the other. A firewall separates the two houses on both the first and second floor, so that the insurance risk is minimized. Each house has three bedrooms upon the second floor. Bath rooms are off the halls and each house has a second floor balcony or porch. The halls are very small and stairs extend off of same to the attics, which are also divided with a fire wall. An elegant "Double Home of Character" and one that will wonderfully assist an investor in covering the expense of the various items of the up-keep of a home.

Five thousand dollars should cover the cost of this house, if built of inexpensive materials, but \$7,500.00 could be invested in it to advantage, where the locality and rents would warrant the highest grade of equipment and finish.

No. 203—Size 41 x 55 feet. Price of Plans \$60.00. Price of Specifications \$5.00.



### A SEVEN-ROOM BUNGALOW

In this arrangement of exterior and plan it is possible to build this seven-room bungalow at a very low cost, by virtue of the short studding that is required in the construction of the walls and by the minimum roof area made possible by giving the roof a low pitch; the very features that bring about the effect of a bungalow.

The living quarters, that is to say the kitchen, dining room and living room occupy the front part on the plan and the sleeping quarters are entered through a hall off the rear of the living room, off of which four bedrooms are grouped. A stairway also ascends from this hall to storage

space under the roof. The basement occupies a part of the area of the house and is reached from a stairway off of the kitchen. The cost of this house should not exceed \$3,600.00, as it would be built in a locality suitable for such a design.

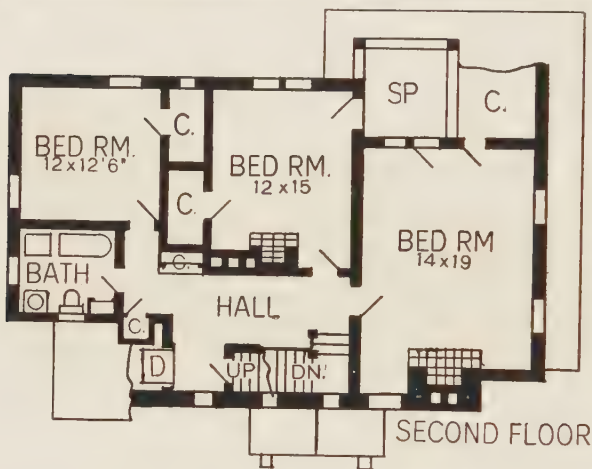
No. 197—Size 30 x 48 feet. Price of Plans \$30.00. Price of Specifications \$5.00.



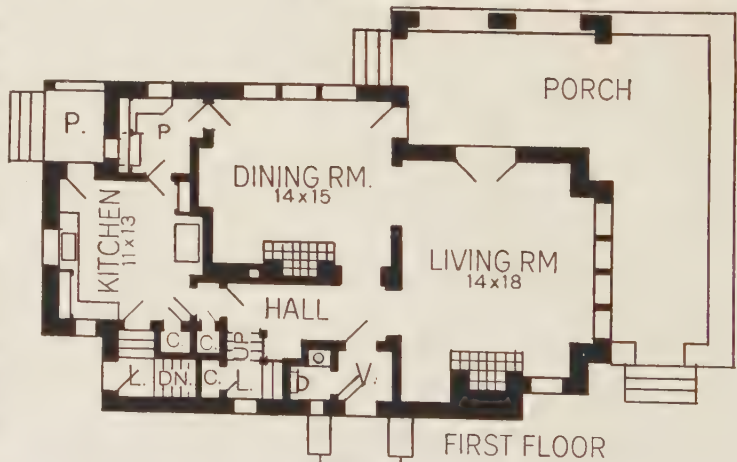
### AN ENGLISH RESIDENCE

Upon this exterior, which has been made as simple as possible, a true expression of interior is carried out. The windows surrounding the entrance are on the stairs and express a stairway going to the second floor. The entrance is accented by a neatly executed hood over the doorway, while the grade landing door is nicely worked out under the longer slope of the front roof. The building has been carried out in a red velvet brick with a wide raked joint and the gable is carried out in shingles above the first story windows. These shingles are stained brown and the roof is covered with sea green slate. The exterior woodwork is stained brown and the sash are painted white. The general effect is both artistic and novel, and possesses the dignity of a "Character Home."

The house is entered through a vestibule, off of which is a small toilet room and the hall connecting the living room, dining room and kitchen. The stairs ascend from the hall on the front of the house to the second floor. The living room occupies the right hand end with a large window and a fireplace at the front, balanced on the opposite end with French doors to the porch, part of which is covered, while that part extending across the bay in the living room is uncovered. The dining room is provided with a fireplace and a



recess for a buffet and has three windows to the rear and also a door out on to the porch, while service to the dining room is gained through a pantry. The second floor has three bedrooms, one of which being the same size as the living room. A bathroom and linen closet are also provided and a sleeping porch off of two of the bedrooms on the rear. The attic is divided into three bedrooms, and large storage closet.

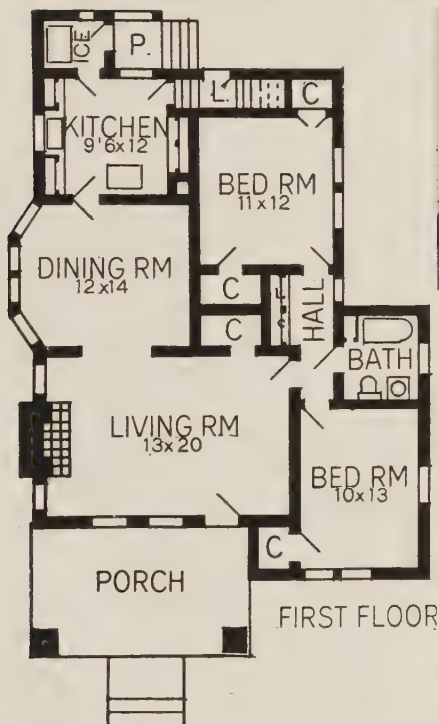




The floors throughout the entire house are oak, waxed and polished. The vestibule, first floor toilet room and bath room have tiled floors with cove base, marble thresholds and Keene's Cement wainscot. The interior trim is birch, with mahogany stain in hall, living room and dining room, and white enamel finish in bedrooms and bath. The floor of the porch and terrace is reinforced concrete laid off in squares to imitate tile, and the porch and sleeping porch is enclosed in glass, which can be removed and screens substituted.

A house of this size and type should be built for from \$6,000.00 to \$7,000.00, depending on local conditions.

No. 162—Size 44 x 26 feet. Price of Plans \$60.00. Price of Specifications \$5.00.



### A FIVE-ROOM BUNGALOW

Wide siding or large shingles, with shingle roof would be most appropriate for the exterior of this design. The chimney should be in rough brick, cobblestone or rough field stone.

The large living room is entered direct from the porch, and is connected with the dining room by a wide cased opening. The kitchen has complete equipment with separate refrigerator room and stairway direct to basement, which extends under the rear portion of the house.

The bedrooms and bath open off of a well lighted hall, which also contains a large linen closet.

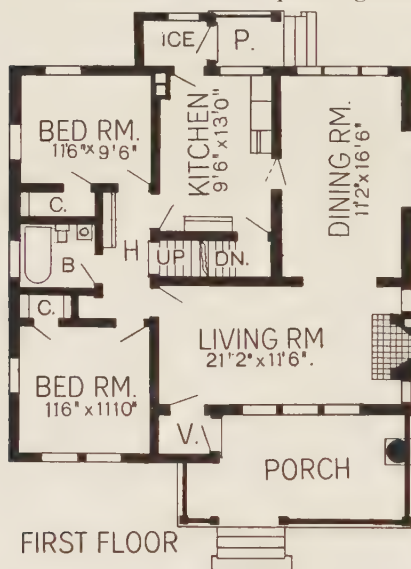
The cost should not exceed \$2,500.00, if built for Northern climate. In the South or West this design could be built for considerably less.

No. 196—Size 31 x 37 feet. Price of Plans \$20.00. Price of Specifications \$5.00.



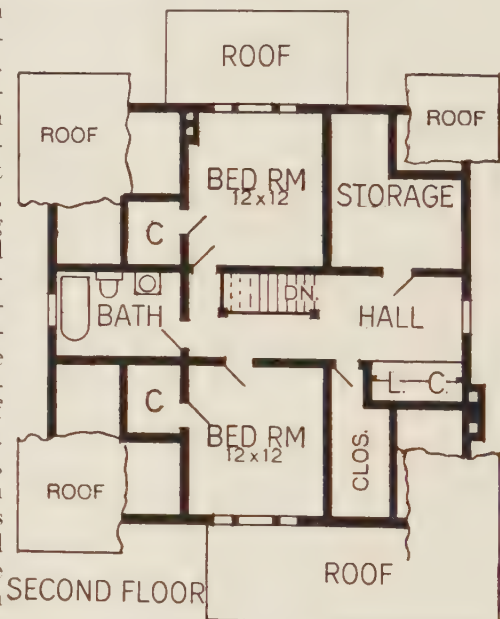
### A SHINGLE AND CLAPBOARD BUNGALOW

A bungalow of considerable width and suitable for any climate or location. The exterior is clapboarded to the top of the windows and painted white, the gable ends are shingled and stained brown, while the chimney and foundations are of stone. Simple roof lines and hooded porch give a restful homelike air to the whole exterior.



FIRST FLOOR

The plan is simplicity itself. A large living room with fireplace at one end, a dining room and a convenient kitchen constitute the living portions of the house. Bedrooms, bathroom and stairs to second floor are



SECOND FLOOR

off a small hall accessible from the living room and kitchen. The complete separation of the living quarters from the sleeping rooms in our bungalow plans has met with great favor. Both bedrooms and hall have ample closet space and the second floor is finished in one large room, but could be divided into two bedrooms and bath if desired, as illustrated.

Cost \$2,400.00. Can be built for from \$1,200.00 to \$3,600.00.

No. 112—Size 34 x 33 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

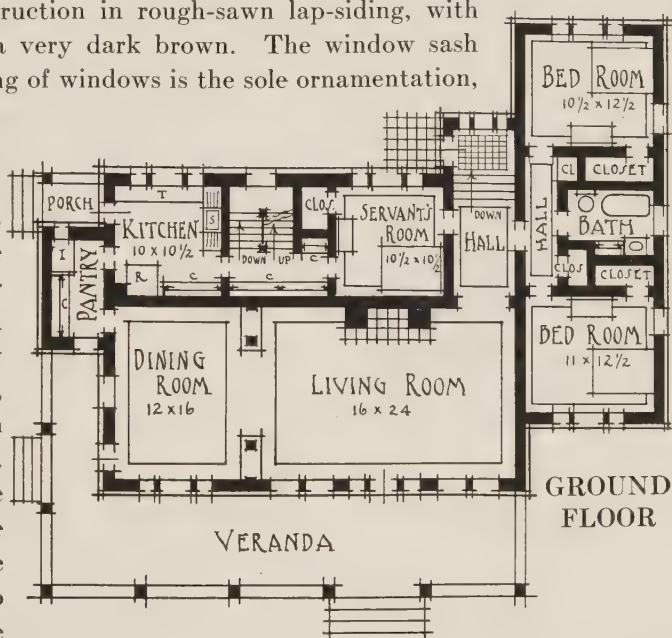
We also carry this plan in 36 and 40-foot widths at same price.





A SEVEN-ROOM BUNGALOW

A bungalow of frame construction in rough-sawn lap-siding, with the roof shingled and stained a very dark brown. The window sash are painted white. The grouping of windows is the sole ornamentation, and all windows are casements with glass set in leaded lines. The house, being situated between the avenue and lake, has the entrance from the avenue side and a veranda looking over the lake. The living room and dining room are separated by high cabinets forming bookcases, while the ceiling-line is unbroken through both of these rooms. The kitchen is isolated, and the servant's room is handy to the kitchen. This room is made accessible from the main hall so that it may be used as one of the main bedrooms or as a den. The sleeping quarters of the house are carried out according to the same principle of isolation as in all our bungalow plans. The attic contains one finished bedroom and a large finished storage space, lighted by windows at each gable end. Basement under the entire building.



Cost \$5,100.00 as built. Can be built for from \$4,500.00 to \$6,000.00.

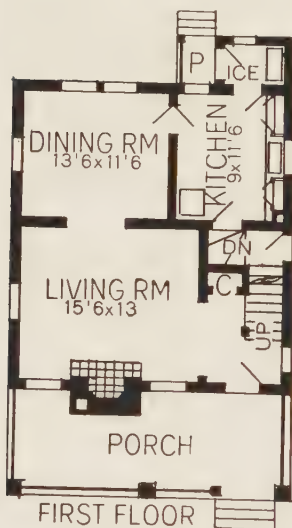
No. 122—Size 51 x 41 feet. Price of Plans \$35.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.

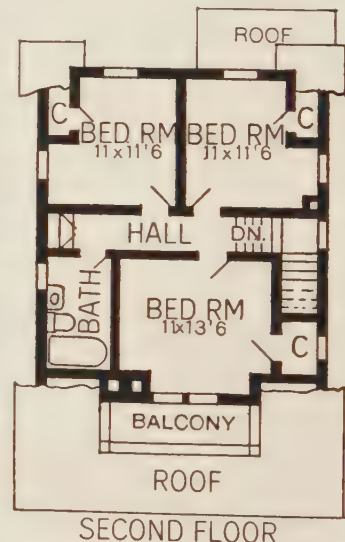


### AN ATTRACTIVE BUNGALOW

This plan is one that has been built a number of times with varied exteriors. The general arrangement is one that is compact and is as small as a house can be built and still keep all of the salient and important points of a well appointed home. In this small plan it will be noted that a cold room is provided, with a kitchen porch, ample



sized and fully equipped kitchen, grade landing to the basement from the exterior and from the kitchen, a small reception hall with a coat closet off of it and with the dining room and living room opening nicely into each other. The second floor has three good bedrooms and a bath and at the end of the hall is provided a linen closet, while the main bedroom on the front has a balcony over the front porch. This is, undoubtedly, one of our best plans for a small house.

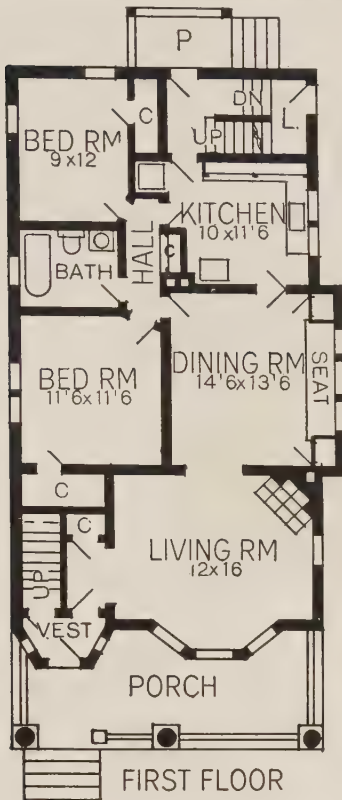


This design has been built a number of times for \$2,300.00 with hardwood floors, hardwood trim on the first floor, Georgia Pine trim in the bedrooms, complete hot air heating plant and good plumbing fixtures. It is one of the few complete houses which can be built under \$2,500.00. Under favorable conditions it could be built for \$2,000.00, and in no event should the cost exceed \$2,500.00.

No. 165—Size 24 x 26 feet. Price of Plans \$20.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.





### A DUPLEX HOUSE

This house is designed for economical construction, as a double house is usually built on an investment basis. Lap siding is used to top of first story windows with shingles above. The roof is in black slate.

The arrangement of each house is the same with attractive fireplace in living room, built-in seat and china cabinets in dining room and complete equipment in kitchen. Both bedrooms and bath open off of a small hall and each bedroom has large closet. Basement is divided to accommodate both houses; also the attic.

This house cost \$5,000.00 complete, with decorations, electric fixtures, walks and yard graded.

No. 205—Size 24½ x 44½ feet. Price of Plans \$25.00. Price of Specifications \$5.00.



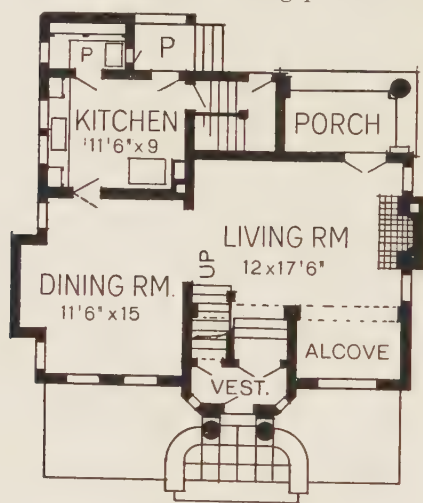
A development of No. 117 as built in Indiana, with a slight change in front porch.

For floor plans see page 257.

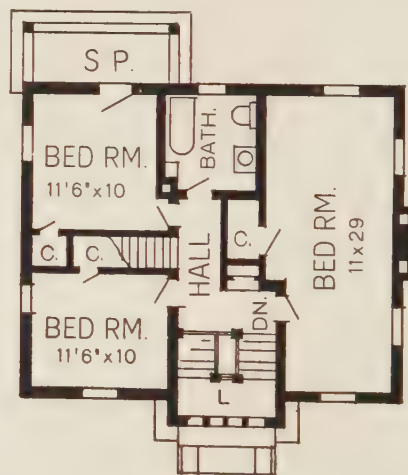


### A SIMPLE COLONIAL HOUSE

This design, not expensive, has the air of a large home. The elimination of the front porch with a carefully executed entrance hood and the large stair bay window are features, which place this house in the category of a "Home of Character." The body is in wide resawn siding painted a cream color with a green stained shingle roof, green



FIRST FLOOR



SECOND FLOOR

stained blinds and white trimming, sash and window frames. The terrace across the front is paved on one side and a porch is provided at the rear of the living room.

The house is entered underneath the main stairs in a depressed vestibule with steps up to the living room level. The stairs go up directly from the living room over the vestibule and to the second floor, while the alcove at the front gives increased wall space and floor area to the main room of the house. The dining room has a recess for a buffet and the kitchen has a butler's pantry with provision for a refrigerator, a rear kitchen porch and grade landing stairs to the basement off the kitchen. The second floor has three bedrooms, one of which taking up the entire side of the house. The



bathroom is placed at the rear of the hall and a stairway extends up into the attic. The house being small is designed with the view of elimination of servants, and the usual combination stairway has been done away with, to the end of gaining the important and impressive feature of an uniquely designed stairs directly off of the living room and framed in with wooden pilasters, wood beam and corbels at the ceiling.

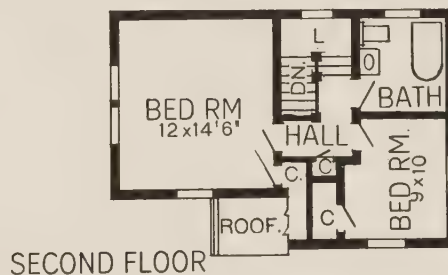
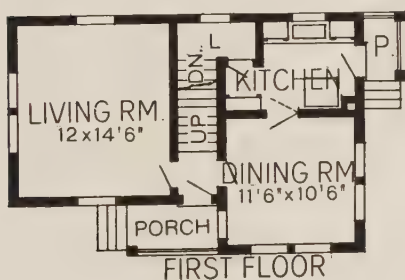
As built the cost was \$3,500.00, exclusive of decorating, electric fixtures, walks and grading yard, using high grade material and equipment throughout. This cost could be reduced to about \$3,000.00 by economy and the use of cheaper material and workmanship.

No. 213—Size 30 x 25 feet. Price of Plans \$30.00. Price of Specifications \$5.00.



### A FIVE-ROOM COTTAGE

Designed to be built as inexpensively as possible and at the same time with as an artistic effect as expense would allow, this cottage while very simple, has good lines and is one admirably suited to a very narrow lot.



The first floor has a living room, dining room and kitchen with a center hall, a feature that is noteworthy in so small a plan as this and the second floor provides for two bedrooms and bath, really a very compact scheme in all its particulars.

This cottage can be built for about \$1,200.00 with furnace and complete plumbing. As a summer cottage it will cost about \$300.00 less.

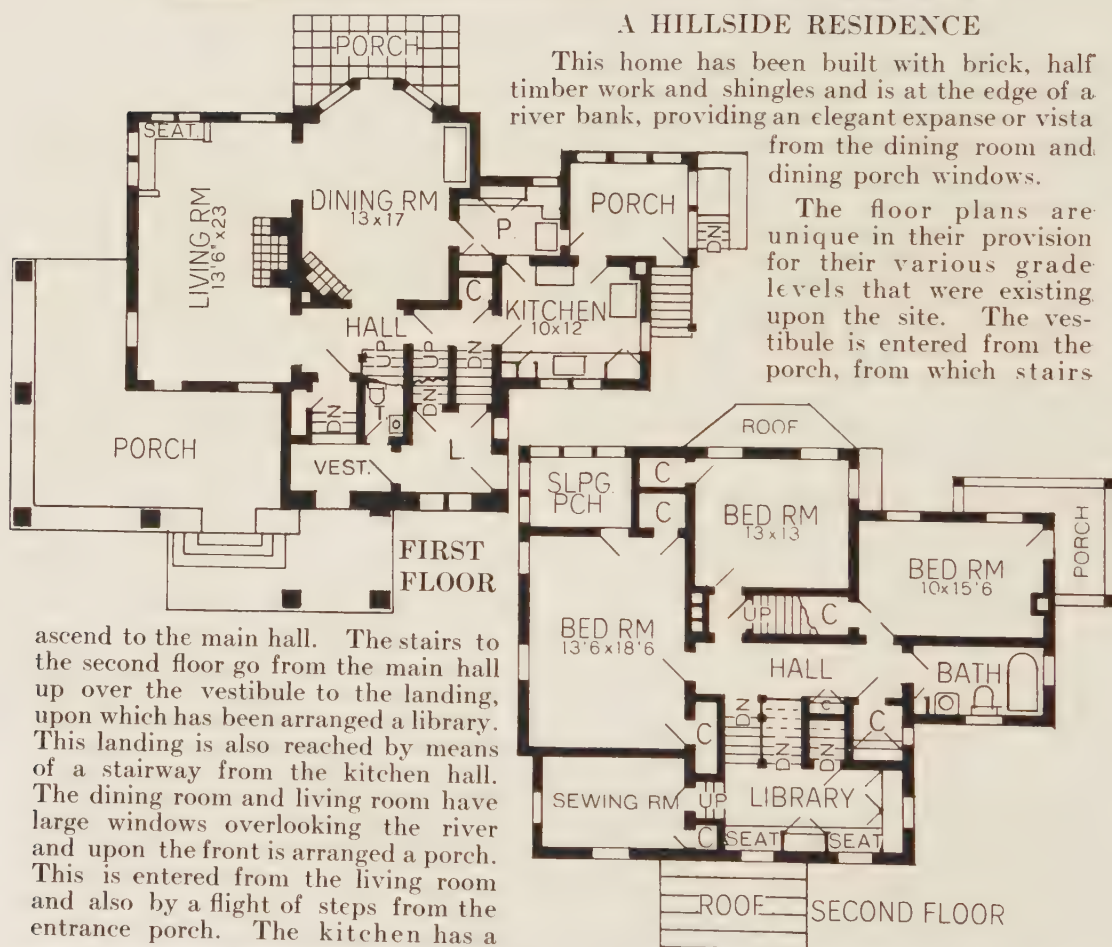
No. 211—Price of Plans \$10.00. Price of Specifications \$2.50.



### A HILLSIDE RESIDENCE

This home has been built with brick, half timber work and shingles and is at the edge of a river bank, providing an elegant expanse or vista from the dining room and dining porch windows.

The floor plans are unique in their provision for their various grade levels that were existing upon the site. The vestibule is entered from the porch, from which stairs



ascend to the main hall. The stairs to the second floor go from the main hall up over the vestibule to the landing, upon which has been arranged a library. This landing is also reached by means of a stairway from the kitchen hall. The dining room and living room have large windows overlooking the river and upon the front is arranged a porch. This is entered from the living room and also by a flight of steps from the entrance porch. The kitchen has a



pantry connecting with the dining room and has an enclosed kitchen porch. The cellar way is reached in addition to the kitchen stairs by means of an outside stair way underneath the kitchen porch. The second floor has three bedrooms, the main bedroom having a sleeping porch off of it. A sewing room is provided above the front porch and is reached by a small flight of steps from the library. The bathroom is placed over the kitchen. The bedroom on the extreme right has also a balcony, which is over the enclosed kitchen porch.

The plan is one admirably suited to the location and would be appropriate for any similar hillside, river bank or lake shore site. Various modifications in plan to suit individual requirements, or particular sites can be made at slight increase in cost of plans.

This design cost about \$7,000.00 as built and should be duplicated for that amount or less, in most localities.

No. 178—Size 48 x 32 feet. Price of Plans \$70.00. Price of Specifications \$5.00.



Pergola Porch



### A FIVE-ROOM BUNGALOW

In this design we have modified the exterior to correspond with prevailing Eastern types, while retaining the usual bungalow plan. The exterior is carried out in wide siding with shingle roof, and chimney and foundation in cobblestone.

The living room has light on three sides and makes a most attractive room. The dining room has three large windows, and kitchen is conveniently arranged with complete equipment. The bath and two bedrooms are connected by a small hall which opens off the dining room.

The plan is square and compact, therefore economical to build. It should be built for \$3,000.00 in suitable construction for a cold climate.

No. 198—Size 26 x 46 feet. Price of Plans \$25.00. Price of Specifications \$5.00.

Directions for ordering plans on page 288. For special designs see page 150.

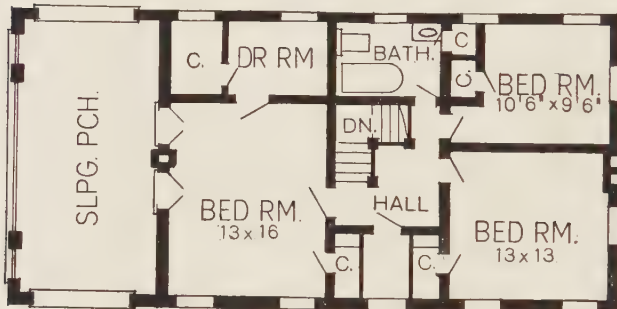
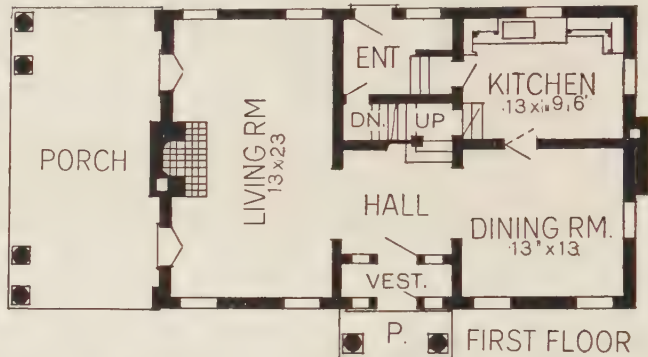


### A MODERN FARM RESIDENCE

In this design advantage is taken of ample porch space both on the first and second floor. It is admirably suited, both in design and plan for a country location.

The first floor has entry both from rear and front with the living room on one side of the center hall and the dining room on the other. The porch, which is level with the ground or nearly so, is reached through French windows from the living room and the kitchen is

reached through the rear entry, from which also is arranged a stairway to the basement. The second floor has three bedrooms, sleeping porch, dressing room and bath, and has ample provision for closet space for each room. The attic, while not very high, is accessible by means of a balanced stairway or trap door from the second floor hall and ample storage space is there provided.



This house cost about \$3,000.00 as built, in the South, but would cost more in the North. Forty-five hundred dollars should cover the cost in localities where building material and labor are very high.

No. 202—Size 39 x 25 feet. Price of Plans \$30.00. Price of Specifications \$5.00.



Directions for ordering plans on page 288. For special designs see page 150.





### A CHEAP DOUBLE HOUSE

This design like our No. 223 is planned for economy in construction as the main object. "Stock" material works to perfection in this plan and there is absolutely no waste in material. The exterior can be developed in a number of types. The roof can be shingle or slate and sides covered with ordinary siding, wide siding, shingles, or stucco,



and the interior finish and floors as cheap or expensive as circumstances may warrant. The plan is particularly adapted to a corner lot, but can be used for a forty foot inside lot.

This house has been built a number of times for \$3,500.00, with hot air heating plant and good plumbing, and should be duplicated for the same amount.

No. 224—Size 24 x 36 feet. Price of Plans \$10.00. Price of Specifications \$5.00.

# Afterword

The Designs—Stock Plans and Specifications. How to Order Plans. Terms.

## DESIGNS

**M**OST of the one hundred and twenty-eight designs shown on the preceding pages have been built, some of them a great many times, under varying conditions and of various materials. Each design represents a certain type or a variation or development of that type. If one of these designs meets your requirements we will send complete working drawings and specifications for the various trades, upon receipt of the price quoted with each design. These working drawings are in accordance with the plans as shown and described and the specifications will be prepared according to your instructions.

The description of each design is, of necessity, very brief, and the floor plans are reduced to a mere outline, as, if all the features were shown the plan would be confusing.

Interior trim, if mentioned at all, is described very briefly in connection with the designs. This is not only on account of lack of space but because the selection of this finish depends largely upon your individuality and the cost of the various woods used for finishing in your locality. For the cheaper designs "stock" trim should be used. For the more expensive houses suitably designed trim is detailed on the working drawings.

Should you desire changes in the plans, write us before ordering and we will quote prices for the plans with changes desired. Unless the changes necessitate an entire redrawing of the plan the extra charge will be nominal.

## REVERSED PLANS

Plans will be reversed, to suit location, without extra charge.

## WORKING DRAWINGS

The Working Drawings consist of three (3) sets of blue prints of quarter scale drawings of basement, first, second and attic floors, roof plan, and the four elevations of the exterior; three-quarter scale details of seats, cupboards, china cabinets, stairs, and other features which require detailing; and full size details and sections of interior trim, mouldings, brackets, beams and other features, which cannot be made plain by scale details. On these drawings all dimensions required by the contractor are given in feet and inches, including story heights, flues, glass, door and window openings, etc. In fact, every required measurement is given, so that any contractor, of average intelligence, can build from these plans without supervision by an architect.

## SPECIFICATIONS

The specifications are a thorough description of the drawings, dealing at length with the various features of the plans and elevations, and describe the kind and quality of all materials and workmanship and the method of construction. They also contain adequate clauses protecting the owner and insuring good workmanship. Three (3) sets of specifications are included at price quoted.



### CONTRACT BLANKS

The necessary contract blanks for mason, carpenter, etc., are also included.

### EXTRA SETS OF PLANS AND SPECIFICATIONS

Extra sets of blue prints and specifications will be furnished at \$1.00 per set.

### HOW TO ORDER PLANS

A blank form for ordering stock plans and specifications follows the advertising section. Please use this form in ordering. If you are in doubt about the right materials to use do not answer the question concerning that material and we will specify the right material for the purpose.

We will gladly answer inquiries concerning the designs or make suggestions concerning changes or elaborations to meet your requirements.

Our aim is to turn out the highest grade work, regardless of cost. We do not attempt to compete in price with a certain class of so-called plans, which are extensively advertised for sale at nominal prices, or given away with materials, etc. Our work will bear comparison with that of the best architects in the country.

### TERMS

Our terms are net cash with order or C. O. D. with privilege of examination. If, *for any reason*, the plans are not satisfactory we will refund the purchase price on return of the blue prints and specifications, in good order, within three days after they are received by purchaser. This does not apply to special designs, or stock designs on which changes have been made.

### TO CONTRACTORS AND BUILDERS

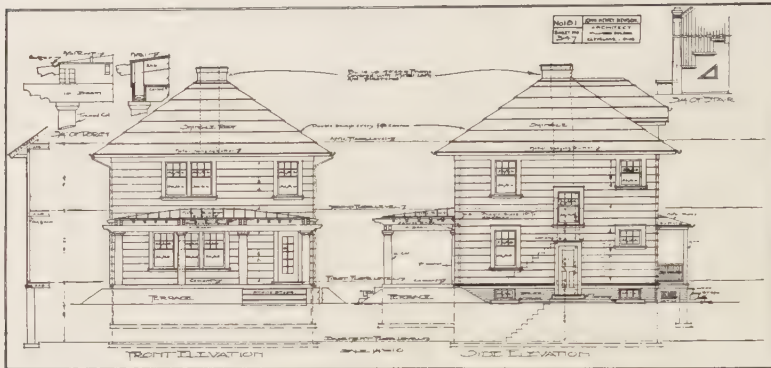
We will quote discounts on plans ordered in quantities, on request, the discount depending on number of designs ordered at one time.

### SPECIAL DESIGNS

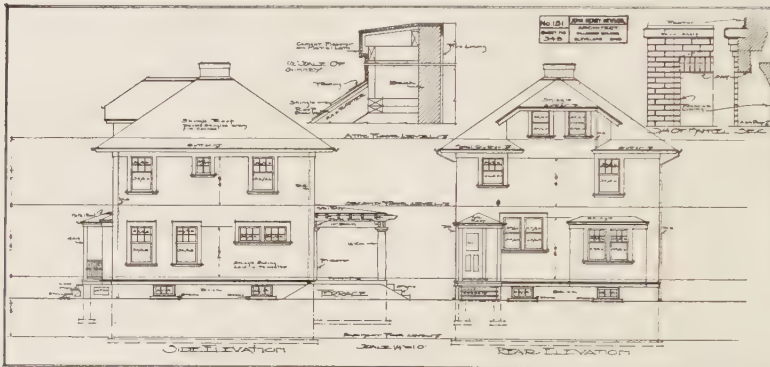
If no plan in this book meets your requirements, see our SKETCH OFFER and article on SPECIAL DESIGNS on page 150.

JOHN HENRY NEWSON (Inc.)  
WILLIAMSON BUILDING  
CLEVELAND, OHIO

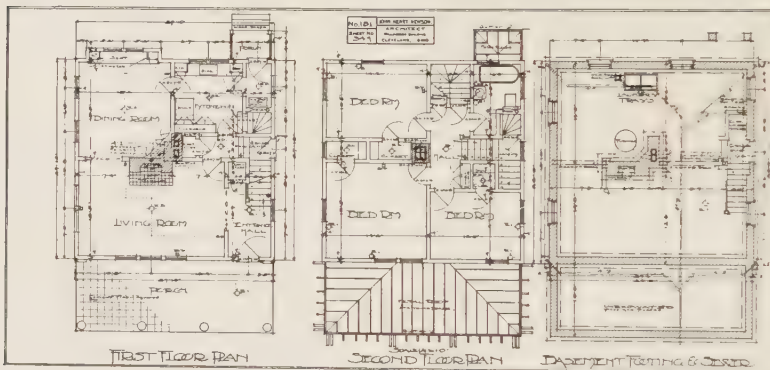
A greatly reduced fac simile of the working drawing for Design 181, is shown on the following page.



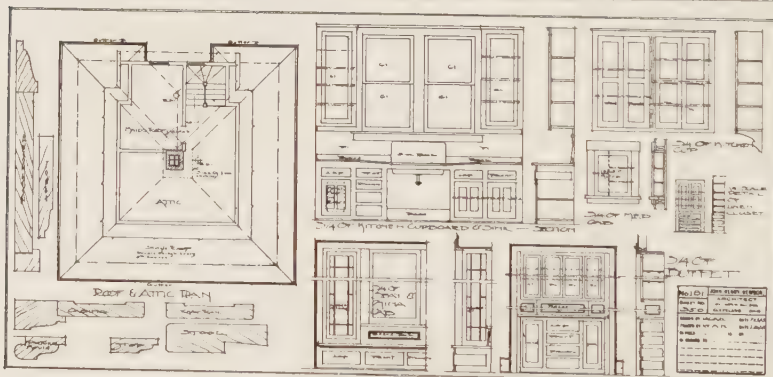
Front and Side elevation.  
Detail of Pergola beam  
ends.  
Stair detail.  
Section showing construc-  
tion.



Rear and Side elevation.  
Details of Chimney con-  
struction.  
Mantel Detail.



Basement, Footing and  
Sewer Plan, First Floor  
Plan, Second Floor Plan.  
Note that all measure-  
ments are given.



Attic and Roof Plan.  
Full size details of Interior  
Trim.  
Scale details of Cupboards,  
China Cabinets, Seat,  
Buffet etc.

Working drawings of No. 181 greatly reduced.



Look for the Name Yale on Locks and Hardware



**W**HEN your home is equipped with Yale Locks and Hardware you can point to it with pride and live in it with a feeling of perfect security.

From our carefully selected stock of Yale products we can fill most orders promptly.

We have many beautiful specimens of Yale Hardware in our exhibit rooms, which we invite you to inspect.

A number of Yale designs are illustrated in the article on Locks and Hardware on page 100.

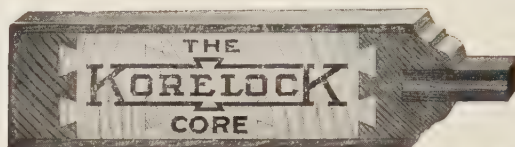
**THE DAVIS, HUNT, COLLISTER CO.**

151 Ontario Street

::

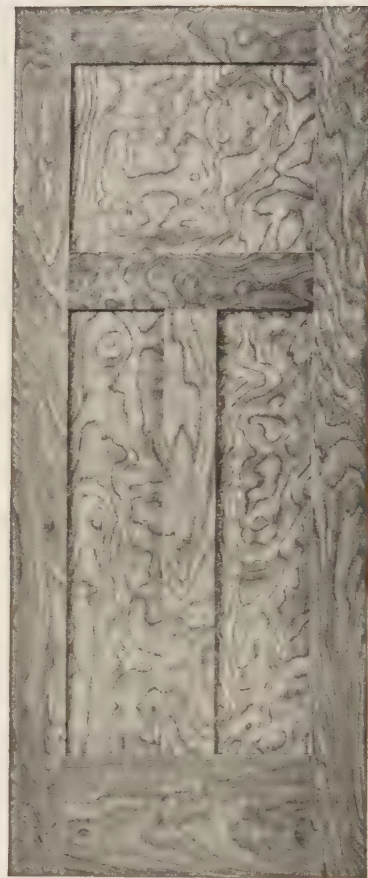
CLEVELAND, OHIO

# Hardwood Veneered Doors



Birch. Design No. 381

The  
**KORELOCK**  
 Door



Birch. Design No. 462

We make two-thirds of all the standard Veneered Doors used in the world.

Special attention given to Doors, Interior Finish and Cabinet Work in accordance with architects' specifications and details.

Every **KORELOCK** Door is guaranteed against faults in construction. Defective doors will be replaced with new doors in the white, *freight paid to your station.*

WRITE FOR CATALOGUE

**PAINE LUMBER CO., LTD.**  
 OSHKOSH, WIS.





# Wiring Devices

Besides the reputation for reliability obtained by their high mechanical and electrical efficiency, G-E Wiring Devices are known for their pleasing symmetry and excellent finish.

Each device is designed particularly for its purpose—those for residence use, for instance, are graceful and as compact as is consistent with good engineering.

G-E Wiring Devices invariably harmonize with the general surroundings, however artistically carried out.

The porcelain parts of G-E Wiring Devices are clean, smooth, glossy and white and the many beautiful and lasting finishes in which metal covered devices are supplied—from the mirror-like burnish of the polished finishes, to the soft, satin-like sheen of the dull finishes—are the result of infinite care and long experience.

Attention is called to our new white enamelled switch plates and sockets.

Send for our Wiring Device catalogue—it is the most complete reference published.

*G-E Wiring Devices are for sale by all leading dealers in electrical material.*

## General Electric Company

*Largest Electrical Manufacturer in the World*

General Office

::

Schenectady, N. Y.

Sales Offices in All Large Cities

*Trade Mark and Guarantee Label Registered at Washington, D. C.*

Stands for all that is best as to design, workmanship, finish and durability in Porcelain-Enameled Iron Plumbers' Ware



**E**VERY piece of KOHLER Porcelain-Enameled Iron Sanitary Ware bears the above label in MAROON and GOLD, and has the name KOHLER cast on it in raised letters.

It is to the interest of the builder that KOHLER goods are called for in the specifications. He should be sure that every piece of porcelain enameled iron sanitary ware for the bath room, kitchen and laundry bears the MAROON and GOLD Trade Mark Label, as it is a protection against annoyances arising from imperfections prevalent in inferior ware, often making replacements necessary.

# KOHLER COMPANY

SHEBOYGAN    :-    WISCONSIN    :-    U. S. A

## BRANCHES

NEW YORK  
47 W. 42nd STREET

CHICAGO  
514 FIRST NAT'L BANK BLDG.

SAN FRANCISCO  
1001-3 MONADNOCK BLDG.

LONDON  
329 HIGH HOLBORN, W. C.



# The Trenton Potteries Company China and Porcelain Plumbing Excels

**N**OT only are the goods we manufacture considered the standard of attainment by other makers, in quality, but in design and in sanitary qualities they excel anything on the market. A word to your architect or plumber will convince you we make no empty boast. *For instance:*

## The Si-wel-clo Noiseless Closet

Just one feature of our line but desired by every builder of a home.

A closet which flushes noisily makes most people feel uncomfortable. How is it in your home? Have you ever hesitated to use the toilet when your family or guests were within hearing because of its noisy gushing or gurgling? If so you will be interested in the Si-wel-clo Noiseless Syphon Jet Closet.

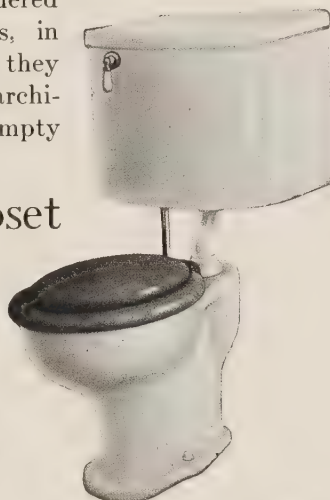


Plate 982-M. Si-wel-clo Closet Combination

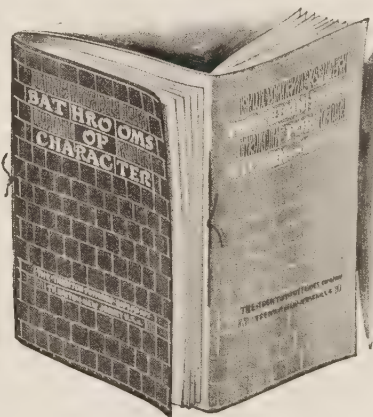
This fixture is so constructed that, when properly installed, it cannot be heard outside of its immediate environment. It is the nearest to perfection yet reached in closet construction.

We have produced the Si-wel-clo Closet with this one thought in mind—its silent operation. It was not a fortunate, but unforeseen result from a new design. Bear in mind, other manufacturers claim this noiseless feature for their products, but only incidentally as one of other claims.

We have no other fixture that can approach the Si-wel-clo in its silent operation.

## Send For These Catalogues

They will open your mind to what Solid Porcelain and Vitreous China can do for your home. Illustrates the best—not necessarily the most expensive—types of sanitary conveniences. Tell you when these goods should be used and why. Write for booklet S-15.



# THE TRENTON POTTERIES CO.

TRENTON, NEW JERSEY, U. S. A.

*World's Largest Manufacturer of Superior Quality Sanitary Pottery*

# MUELLER—that's the Name

Which will insure you brass plumbing goods of undoubted and undisputed quality. They will yield you enduring and satisfactory service—the very thing that you want—that you pay for.



Mueller Fuller Basin Cock—D 10891

## Be Sure That Your Plumber

Uses our goods. They will save you the after expense of frequent repairs. The name "MUELLER" or "H-M" is stamped on every piece. We stand back of our goods with an

### *Unconditional Guarantee*

against any defect in manufacture.

We prove their service giving qualities by testing them under 200 pounds hydraulic pressure—five times as much as they will have to stand in ordinary service.

*"There's Lasting Class in Mueller Brass"*

## H. MUELLER MFG. CO.

DECATUR, ILL.	NEW YORK CITY	CHICAGO	SAN FRANCISCO
W. Cerro Gordo	254 Canal St.	179 N. Dearborn St.	589 Mission St.



# For Homes of Character—



RESIDENCE OF E. T. BEDFORD, ESQ., GREENS' FARMS, CONN.  
MONTROSE W. MORRIS, ARCHITECT. JOHN C. UDALL, BUILDER.  
H. W. MILLER, INC., PLASTERERS.

## Walls Plastered With "Tiger Brand" Hydrated Lime

This material gives the walls the beauty, comfort and permanence that should be part of every home of character.

Used in the plastering it makes a wall which deadens and softens sound. In the finishing coat it produces a smooth, perfect surface which will not "pit," "pop" or blister. It is suitable for any decorative scheme the owner desires to use.

"Tiger Brand" Hydrated Lime will reduce your cost of plastering because it is easy to handle and to apply.

### *See that these specifications go into your contract*

**SCRATCH COAT**—600 lbs. "Tiger Brand" White Rock Finish, 1200 lbs. sand, 1 bushel hair. Use a shallow box or sand ring. Put water in first, then run in "Tiger Brand" White Rock Finish; mix to a thin paste then add well-soaked and beaten hair. Hoe the mass over well and add sand.

**BROWN COAT**—To be applied after scratch coat is dry. 300 lbs. "Tiger Brand" White Rock Finish, about 1200 lbs. sand and  $\frac{1}{2}$  bushel of hair. Use a shallow box or sand ring. Put water in first then run in "Tiger Brand" White Rock Finish, mix to a thin paste then add well-soaked and beaten hair. Hoe the mass over well and add sand.

**FINISHING COAT**—To be applied when the second coat is nearly dry. Sprinkle with clean water if bone dry. To each 100 lbs. of "Tiger Brand" White Rock Finish add 25 lbs. of best grade calcined plaster. Add small proportion of washed sand or marble dust, either in the putty box or on mortar board. Finish coat to be applied in a first class workmanlike manner and troweled to a smooth polished surface free from brush marks.

**The Kelley Island Lime and Transport Co.**  
Cleveland, Ohio



# A DURABLE PLASTER FOR BEAUTIFUL HOMES

SALON—R. A. LONG RESIDENCE, KANSAS CITY, MO. HENRY F. HOIT, ARCHITECT



PLASTERED WITH BEST BROS. KEENE'S CEMENT

Ultimate COSTS are determined by Service rendered, rather than by initial PRICE. That is why

## BEST BROS. KEENE'S CEMENT

*"The Plaster That Stands Hard Knocks"*

has been used for the interior plastering of many of the finest residences erected in this country during the past quarter of a century. Durable, sanitary and of most pleasing appearance, BEST BROS. KEENE'S CEMENT does away with the annoyance and unsightliness of damaged or falling plaster and eliminates forever the cost of repairs.

Its use is a genuine economy, and a source of permanent pride to the owner.

### "THE INNER WALL" ON REQUEST

A Concise Statement of Facts.

An illustrated booklet containing a lot of interesting facts about plastering. Insure the appearance of your new residence by writing to-day for a free copy of this valuable work. You will enjoy reading it.

Best Bros. Keene's Cement Co., Dept. K  
MEDICINE LODGE, KANSAS

NEW YORK OFFICE  
The Fifth Avenue Bldg.

Established 1889

CHICAGO OFFICE  
1st National Bank Bldg.

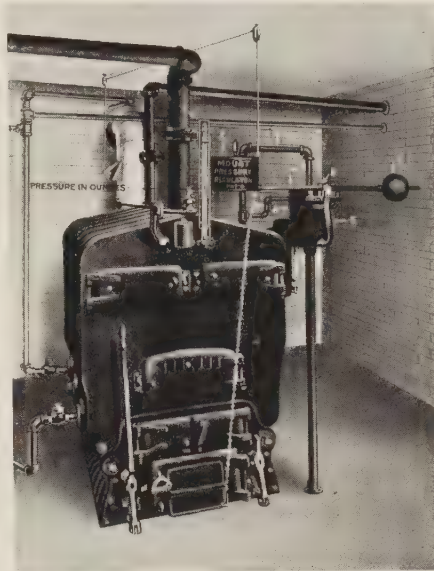




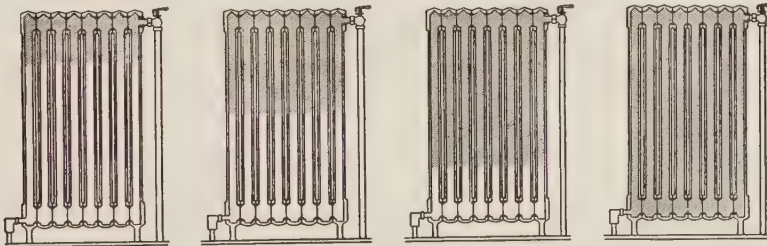
# The Mouat Vapor Heating System

**A** REFERENCE to pages 61-62-63, shows that while vapor was long regarded as the best heating medium, it could not be used because it could not be controlled. The invention of Mr. T. G. Mouat of an Automatic Pressure Regulator which is absolutely positive in its action and control solved the problem of vapor, and opened the way to its general use.

The Mouat Regulator automatically keeps the boiler pressure at two to three ounces—the pressure demanded for graduation. The regulator admits air to the fire in exact measure as the radiators demand heat. This insures the best combustion for both hard and soft coal and saves much fuel; if gas is used, the regulator so controls the gas supply valve that the minimum quantity of gas is consumed. The amount of coal or gas used depends upon the heat required at the radiators, and this depends upon the opening and closing of the Mouat Controlling or Graduating Valve at the radiator. (See cut of valve on page 63.)



MOUAT AUTOMATIC PRESSURE REGULATOR



The shaded parts are the heated parts which may be increased or decreased at will by partially opening or closing the Controlling valve at the top of each radiator. The Mouat Vapor Heating System thus gives a temperature control in each room according to the conditions of the weather. The practical and economic value of this is hard to over-estimate. This control may be made automatic by the installation of a thermostat.

The Mouat Vapor Heating System can be installed by any good Heating Contractor. Any good standard boiler and radiators may be used.

Send us your plans and we will furnish complete working plans, specifications and instructions, and also inspection.

Any information together with catalogue sent upon request.

**THE MOUAT-SQUIRES COMPANY**  
CLEVELAND, OHIO

The *Manest*  
TRADE MARK

# ECONOMIC FLOUR BOX

FOR RESIDENCES AND APARTMENT HOUSES



These boxes are made of tinned metal and finished in glossy black on outside, decorated like cut above.

They are far superior to wood receptacles as they are proof against rats, mice or vermin of any kind; also against mould, damp or dust.

Are less expensive than the ordinary wood bin and take up less space.

They are easy of access being fastened against inside of cupboard door and are out of the way when not in use. Can also be fastened to wall or set on floor. The following sizes always in stock.

No.	HIGH	WIDE	DEEP	CAPACITY	PRICE
25	16 in.	12 in.	8 in.	1/8 bbl. or 25 lbs.	\$1.75
50	20 "	14 "	11 "	1/4 " " 50 "	2.50
100	25 "	18 "	14 "	1/2 " " 100 "	5.00

Discount .....

MANUFACTURED BY

## THE MANNEN & ESTERLY COMPANY

2241-2255 St. Clair Avenue N. E.

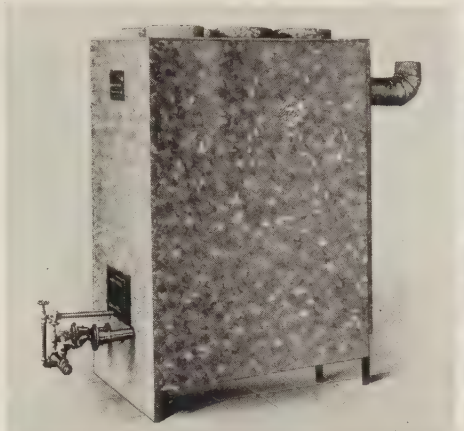
Phones—Bell, North 450

CLEVELAND, OHIO

Cuy. Central 1788



THE "MANEST" NATURAL GAS FURNACE

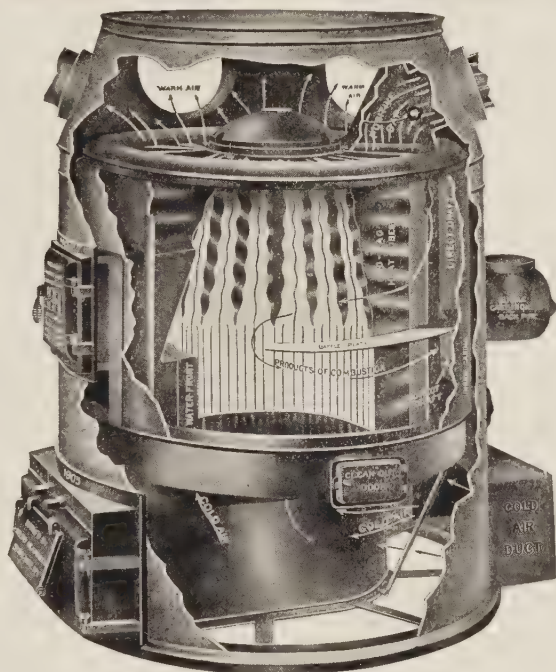


(Patented) Can also be attached to coal furnace as a combination

THE "MANEST" FAMILY CLOTHES DRYER



(Patented) For Residences, Apartment Houses, Hotels, Institutions, etc.

THE  
KELSEYWARM AIR  
GENERATOR

## THE MANNEN & ESTERLY COMPANY

2241—2255 ST. CLAIR AVENUE, N. E., CLEVELAND, OHIO.  
Phones Bell, North 450

Cuy: Central 1788

CONTRACTORS AND ENGINEERS IN HEATING AND DRYING

MANUFACTURERS OF  
THE "MANEST"  
GAS FURNACES  
AND  
THE "MANEST"  
FAMILY  
CLOTHES DRYER

*Manest*  
TRADE MARK

SOLE AGENTS  
FOR  
THE KELSEY  
WARM AIR  
GENERATOR



## HOW A PANTRYETTE MAKES A MODEL KITCHEN

**T**HE Pantryette centers all your work in one compact spot. You can stand in front of it and do nine-tenths of your kitchen work. It saves hundreds of steps every day.

Your kitchen work must center around your table. Everything you take to your dining room, sink or stove goes on to that table; everything you bring from the refrigerator, cellar, cupboard and kitchen cabinet goes on to that table.

If you must walk from place to place to collect these things and put them back, your kitchen is not ideal. It tires you out.

In your ideal kitchen the Pantryette combines the kitchen cabinet, cupboard and table. It gives more room than any pantry does, all in one spot. You don't walk from place to place. You get through quickly and you are not so tired. You save an hour or two each day.

Every convenience of a high grade kitchen cabinet is built right in the Pantryette. A sanitary flour bin, capacity 65 pounds; a large sugar bin that feeds out automatically; a revolving spice castor that carries eleven air-tight crystal glass spice jars; a metal bread and cake box; compact cutlery drawer; drawer for linen; sliding shelves; convenient cutting board and other equipment.

The cupboards of the Pantryette are extremely big and roomy. They contain more square inches of cupboard space than the ordinary built-in cupboard and will hold all the utensils, dishes and supplies that are used in the kitchen.

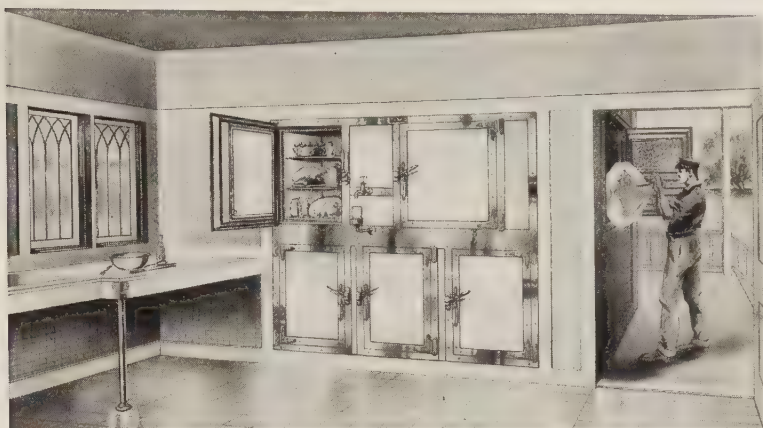
The Pantryette table is larger than the average kitchen table. It is built of inch and one-half strips of hard maple, built up by a special process. It cannot warp. Pure paraffin is driven into the pores of the wood. It is perfectly sanitary.

The Pantryette combines the kitchen cabinet, kitchen table and cupboard without diminishing any one in size and costs a great deal less than the three used separately. Send for the free book "Kitchen Efficiency."

# The Pantryette Company

27 Taylor Arcade, Cleveland





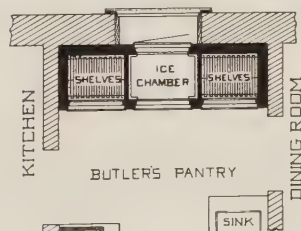
## A Little Forethought

about the refrigerator that is going into your new home will save you time, money and space. You want a refrigerator that will give you perfect satisfaction, perfect convenience and economy in operation. By picking out your refrigerator before you start to build, you can find a stock size box which may be arranged for outside icing so that you will save all the muss and annoyance of having the ice man tramping through your kitchen.

## M<sup>c</sup>CRAY REFRIGERATORS

are built in all sizes and styles to meet all requirements of space and pocketbook. They are made with wood, enamel, porcelain or opal glass linings, have a perfect circulation of cold, dry air, and are guaranteed to give satisfaction. Any of our stock sizes may be equipped with a rear or side icing door. The illustration shows one of our large glass lined stock size refrigerators and the floor plan shows how it was arranged in one home so as to occupy no unnecessary space.

We also build refrigerators to order when it is advisable and have a corps of draftsmen which is at your service to help in solving your refrigerator problem. Write for our residence catalog and booklet "McCray Refrigerators in American Homes" which will give you a great deal of useful information.



## M<sup>c</sup>CRAY REFRIGERATOR COMPANY

502 Lake Street

KENDALLVILLE, IND.

*Agencies in all large cities*



Before you go to your Steamfitter are you capable of discussing your heating problem intelligently with him?

You can and will be after you have read our

### **“Common Sense Heating” Book**

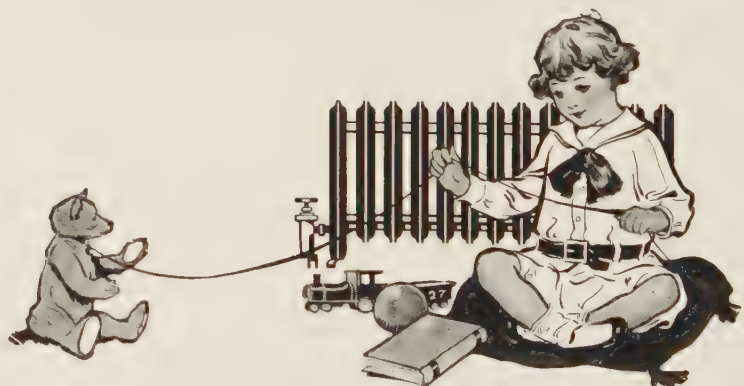
It is a non-technical talk on heat. It answers your heating problems authoritatively and finally and it explains how

# Pierce Boilers and Radiators

Not only furnish right heat but they will pay for themselves many times over in fuel economy and freedom from repairs. This book is free. Send for it to day—read it—and then go to your steamfitter.

Pierce, Butler & Pierce Mfg. Co., 239 James Street, Syracuse, N. Y.

Showrooms in Principal Cities





*"The Finger writes and having writ, moves on."—Omar.*

# WHAT AIR CLEANING SYSTEM SHALL I PLACE IN MY HOME?

**Our Answer Is:—**

- The one that is most Efficient
- The one that is Fool and Accident Proof
- The one that is most Durable
- The one that requires least Attention
- The one that consumes least Power
- The one that not only Cleans thoroughly, but Ventilates the house as well
- The one that is being installed at the rate of three to one over all other Stationery Cleaners combined

*Ford Motor Company,*

The United Electric Co.,  
Canton, Ohio.

May 13, 1911.

Gentlemen:—

I am certainly gratified at the efficiency shown by "TUEC" Vacuum Cleaning System recently installed in our Administration Building. By a careful mechanical examination, I found that the very satisfactory working of these machines was due largely to the simplicity of their construction.

Our office Building is 300 feet long by 60 feet wide, two stories and basement, and the TUEC cleaners, which have been in operation since February last, running all night long, have certainly proven beyond question that they are not only essential for absolute cleanliness but, being designed and constructed on the "unit" plan, are simple, durable and economical in operation, and I take pleasure in recommending them.

Very truly yours,

*Henry Ford*



**THERE CAN BE BUT ONE ANSWER**  
*And that is*

## THE TUEC STATIONARY AIR CLEANING SYSTEM

It has a greater displacement of air than any other machine on the market. It is simplicity itself—having less than one-quarter the parts of any other machine. Absolutely no mechanical knowledge is necessary to operate. Fifteen minutes of your time during an entire year will suffice to keep the TUEC at its highest efficiency. It will completely renew the air in the average size room every five minutes during operation. It gets all the dust—all the germs—all the coarse dirt and whirls them to the steel tank in the basement.

Installed in THOUSANDS OF HOMES and going into TENS OF THOUSANDS MORE!

You cannot think of air cleaning without thinking of the TUEC.

**THE UNITED ELECTRIC CO.**  
37 HURFORD STREET, CANTON, OHIO.

# Natural Wood Finishing

The finest and most satisfactory finish on natural woods can be produced with the following Finishes which are the perfected result of our 55 years experience in Varnish making.

**LUXEBERRY WOOD FINISH**—*Light*—For the general interior trim—This is unique among Interior Finishes, developing and preserving the grain and color of all woods, and producing a handsome and lasting finish.

**LIQUID GRANITE**—For floors, and for other interior work where the exposure is severe, such as bathrooms, balustrades, baseboards, etc.—Liquid Granite possesses toughness and elasticity to a remarkable degree so much so that though wood finished with it may dent under a blow the finish will not crack.

**LUXEBERRY SPAR VARNISH**—This is for the front door, porch ceilings and other outside uses. It is especially made to withstand exposure to the weather, and possesses remarkable durability under the severest conditions of season and climate.

**LACKLUSTRE**—This is a one coat Finish, made in twelve colors. Its use is very simple, consisting merely of rubbing into the wood with a rag, the result being an artistic dull mission effect. It is especially desirable for bungalows, and any interior woodwork where a dull, unvarnished finish is wanted. The color tones produced are soft and pleasing and do not obscure the grain of the wood.

**SHINGLETINT**—Under this trade name we make a line of Shingle Stains in all desirable colors. They impart artistic and durable color tones to the shingles. There is no better value made in Shingle Stains than our Shingletint, and if you write us we will tell you more about it.

In addition to the above, the use of first class *Fillers*, *Stains* and *Shellac* is unnecessary, and a mistake made in the selection of these is as fatal to a good finish as the use of the wrong varnish.

We make the right kind for all woods.

If you are interested in better finishing than the ordinary, write us and we will mail you finished samples of wood and instructive literature on natural wood finishing.

We also call your attention to the article on page 47 of this book in which we have endeavored to impart a little practical information and advice, that should appeal to all who are interested in artistic interiors and how to get them.

## BERRY BROTHERS

### DETROIT, MICH.

Largest Manufacturers of Varnishes, Shellacs, Lacquers, Stains, Fillers, Etc., Etc.

BRANCHES—New York, Boston, Philadelphia, Baltimore, Chicago,  
Cincinnati, St. Louis, San Francisco

FACTORIES—Detroit, Mich., and Walkerville, Ont.

#### WAREHOUSES

Denver, Col.  
Dallas, Texas  
Kansas City, Mo.  
Chattanooga, Tenn.  
Winnipeg, Man.

#### FOREIGN BRANCHES

LONDON—5-6 Palace Chambers, Westminster, S.W.  
MELBOURNE—46 Elizabeth Street  
MILAN—P. O. Box 903



# WOOD-MOSAIC COMPANY INC.

MANUFACTURERS

## Parquetry and all kinds of Ornamental Hardwood Flooring



The general opinion is that Parquetry Flooring is a luxury. Hardwood floors have themselves created this impression by their perpetual reflection of luxury, attractiveness and refinement—and because the wealthy almost invariably use Parquetry flooring in abundance.

In the finest palaces in the land, hotels, clubs, theaters, government buildings, and every conceivable type of structure, Wood-Mosaic floors are to be found. No higher quality products are produced than Wood-Mosaic Floors. It is the sanitary features, economy and general advantages that we would have you appreciate—and understand that Wood-Mosaic Floors are preferable, from the modest cottage to the millionaire's palace.

Our booklet tells its own graphic story. It is profusely illustrated and will answer many of your questions as to what floor—for the new home. Get this booklet. Read it—for present or future profit. Every home lover should have a copy. You may be assured in advance that you will find Wood-Mosaic Floors interesting reading. It is free if you make the request.

We have floor laying agencies in most of the large cities of the United States and Canada. We cannot too strongly recommend the advisability of consulting these agents whenever they are close enough to get in touch with. They contract for the floors laid and finished complete ready for use, thus relieving customers of all necessity for supervision.

Where we have no agents, we will, upon receipt of accurate measurements of rooms, submit detailed drawings showing, as well as we can on paper, how the floors will look when laid, together with exact estimate of cost of material. We furnish such close and careful instructions for laying and finishing the flooring that no person need fear anything but a satisfactory result.

We have our own forests, sawmills, lumber yards, dry-kilns, and Eastern and Western Parquetry factories.

In referring their inquiries to us, our customers have the advantage of these facilities.

## WOOD-MOSAIC COMPANY, Inc.

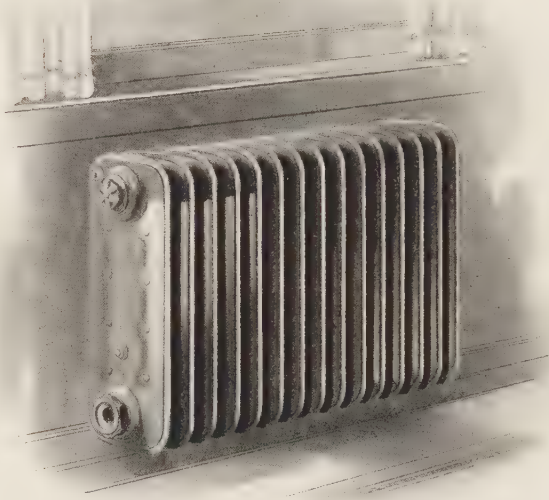
ROCHESTER, NEW YORK

NEW ALBANY, INDIANA

# SANITARY APPLIANCES

**A**RE the only kind you will consider for your home. It is just as important to select Sanitary Radiators as Sanitary Refrigerators and Sanitary Plumbing Fixtures.

## KINNEAR IMPROVED PRESSED METAL RADIATORS



are the *only* Sanitary kind. Owing to their clean, smooth surfaces they will not catch and hold the dust and germs drawn to them from the surrounding air. Furthermore, on account of their construction and lightness in weight as compared with heavy cast iron radiators they can be hung

### ON THE WALL OFF THE FLOOR OUT OF THE WAY

by means of Adjustable Concealed Brackets, which are furnished without extra charge for that purpose. This renders it easy to keep the floors un-

derneath the radiators clean and free from dirt that invariably collects under radiators set on foot. Pressed Metal Radiators are quick acting. No long waits for heating up or cooling off. Because of their thin walls they respond instantly to the operation of the valve. In addition to being sanitary and quick acting they are highly efficient, very economical, strong, durable, compact and attractive.

MANUFACTURED EXCLUSIVELY BY THE

## PRESSED METAL RADIATOR CO.

GENERAL OFFICES

BAILEY-FARRELL BUILDING, PITTSBURGH, PA.

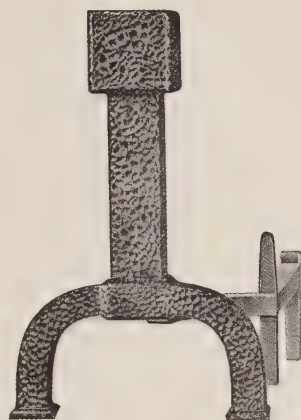
BRANCHES IN ALL PRINCIPAL CITIES

Insist on your heating Contractor specifying **PRESSED METAL RADIATORS** and **PRESTO BOILERS**

A COPY OF OUR NEW CATALOGUE IS YOURS FOR THE ASKING



# HOMES *of* CHARACTER



**T**HIS does not necessarily mean expensive homes. Good judgment in combining the necessities without a show of extravagance means much.

We are safe in saying a "Character Home" cannot be built without using tile, therefore when in need of the following materials **REMEMBER** a penny post card to us will save you dollars.

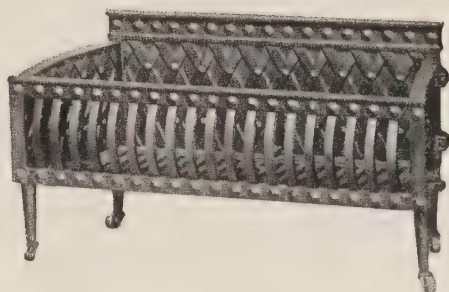
Our advice and catalogues are free for the asking.

You may need:—

Tile Floors in { KITCHEN  
PORCH  
BATH ROOM  
LAVATORY

Tile Wain-  
scoting in { KITCHEN  
VESTIBULE  
BATH ROOM

GAS LOGS  
ANDIRONS  
FIRE SCREENS



WOOD MANTELS  
TILE MANTELS  
DAMPERS and ASH TRAPS

GRATES—for coal or gas

*We ship to any point in the United States*

READ THE ARTICLE ON TILE AND MANTELS  
PAGE 106

## The Shaw Mantel & Tile Co.

OFFICES

CLEVELAND, OHIO :: ZANESVILLE, OHIO

# Ten Reasons For Using AVENARIUS CARBOLINEUM

1. It has proven its worth by 45 years use all over the world, and is the only Genuine German wood preserving oil.
2. We guarantee that two brush coats, or one dipping in hot oil, will double the life of wood. This is a saving of about 400 per cent.
3. All wood decay is a Bacterial Disease. Carbolineum is the strongest and most permanent disinfectant known and a perfect remedy.
4. CARBOLINEUM treatment is cheaper than paint; gives a permanent nut brown color; hardens the wood 20 per cent., and prevents swelling, shrinking and decay.
5. CARBOLINEUM will stand on resinous woods like Cypress and Yellow Pine where paint will not. It brings out the grain. Paint in dark colors can be applied over it after it is absorbed in the wood.
6. CARBOLINEUM will go through an inch board or four shingles laid as on a roof. Dipping shingles is, therefore, unnecessary.
7. For seasoned wood, one heavy brush coat will do. Green wood, or wood for under the ground should have two or three hot coats, or half hour dip in the hot oil.
8. CARBOLINEUM is the most sanitary coating for stables, poultry houses, factory floors, etc., keeping down all vermin and disease as well as preserving the wood.
9. CARBOLINEUM has no equal and is invaluable for sills, posts, timbers, porch floors, factory floors, silos, out-buildings, fences, shingles, or wood anywhere. Also for waterproofing ropes, canvas, concrete, and masonry.
10. It is cheaper than paint, covers more surface per gallon, is easier to apply and, at least, five times as durable.

For further information and special folders, address

**CARBOLINEUM WOOD PRESERVING COMPANY**

CITIZENS BUILDING :: :: CLEVELAND, OHIO

FOREST HILL, CLEVELAND, O.

February 1, 1906.

MR. CHAS. H. HOYT,

Citizens Building, City.

DEAR SIR:

My personal experience with Avenarius Carbolineum covers about eight years use of it, and I cannot find words or space to describe its merits.

My requirements included the preservation of timbers in underground work, fence posts and out-buildings, painting the interior of poultry houses to prevent lice; horse stables to prevent gnawing and feed bins to keep out rats and mice, and many other uses.

Carbolineum will do all these things effectively and cheaply. I honestly believe it has no substitute for the purposes for which it is sold.

I feel that, should this letter lead to a user of Carbolineum, I would hereby have gained a lifelong friend.

Yours very truly,

(Signed) D. E. HOWATT,  
Supt. J. D. Rockefeller's Estate.



Soft pine post painted two coats Avenarius Carbolineum set in ground 3 years. Right hand piece, section same post, same exposure, not painted.



## A Genuine Bangor Slate Roof avoids all roof troubles:

- It won't wear away.
- It won't rust.
- It won't decay.
- It won't crack.
- It won't chip.
- It won't tear.
- It won't warp.
- It won't disintegrate.
- It won't crumble away.
- It won't melt like tar or asphalt roofs.
- It won't burn.
- It won't be affected by acids, gases, or other substances.
- It won't be affected by any climatic changes or conditions.
- It won't require any solder that may melt, or seams that may get out of order.
- It won't rattle like a tin roof.
- It won't need any repairs.
- It won't need any paint to preserve it.
- It won't need any paint to make it look neat, clean, and attractive.
- It won't lose its rich architectural appearance, no matter how long on the building.
- It won't absorb moisture or anything else.
- It won't retain snow or similar loads.
- It won't contract or expand from heat or cold.
- It won't increase the load on your beams by becoming water-soaked.
- It won't shrink.
- It won't retain dampness.
- It won't rot your roof timbers.
- It won't blow off by high winds.
- It won't permit the growth of moss or other decaying matter.
- It won't allow paint or other impurities to get into your cistern water.
- It won't attract electricity like metallic roofs.
- It won't need any excessively strong, hence expensive roof frame, like tile.
- It won't cost as much as any other roofing.



### Durability.

Durability outweighs all other roofing virtues. There is no reason why your roof shouldn't last as long or longer than your building. It is as unnecessary to renew the roof as it is to renew the foundation, provided of course, that you get the right roof in the first place.

### Genuine Bangor Slate Company's Slate.

Outlives the Building without paint or repair, because it is non-porous and therefore non-absorbent; because it is non-mineral and therefore non-rusting. The best test is really the test of time. Our slate was first marketed 60 years ago. Roofs covered with it then, are, and look, today as good as new.

### Freedom from Repairs.

Real durability doesn't mean a roof that must be kept alive with a coating of paint; otherwise the paint and repair bills will soon cost more than a new roof. Our slate need no such preservatives.

### Appearance.

The rich, silky texture of our slate, its smooth blue black color make a very dignified roof that adds character to the building. Its smooth surface responds readily and harmoniously to natural or artificial light effects and harmonizes with natural and artificial surroundings. The foregoing is one of the reasons why our slate is a favorite roofing for Churches.

### Fire Prevention.

Statistics (proof gladly on request) show that the largest percentage of all fires occurs on, or threatens roofs. Statistics also prove that slate roofs are an excellent fire protection. (Proof gladly on request).

### Economy.

The price of our slate is reasonable and with its freedom from repairs and lower insurance rates, a Genuine Bangor Slate roof is the most economical in the long run.

### Send for Our Free Roof Guide.

It gives in a few minutes' reading all the vital facts about any roofing on the market; weighs the makers' own words and claims against each other, and is written in plain, concise language that gives you all the authentic facts so you can do your own thinking. All it costs you to have the book is a post card addressed to

**Genuine Bangor Slate Company**  
Engle Building Easton, Pennsylvania

# We Guarantee Your Roofs, Gutters and Valleys

**To wear not less than 15 years or  
be replaced free of charge to you**

Think what this means to you!

Perfectly weather proof roofs that are neat in appearance, light in weight, perfectly clean, adaptable to every surface. Most economical and durable because with it you receive our written guarantee as follows:—



We guarantee Follansbee Banfield Process Roofing Tin painted with pure Linseed Oil and Venetian Red Iron Oxide, soldered with Rosin will wear on roofs, gutters and valleys for not less than fifteen years, or will be replaced at our expense.

Follansbee Brothers Company

[SIGNED] JOHN FOLLANSBEE

Gen'l Mgr. of Sales

## YOU MUST USE SOME TIN

For the valleys, gutters and flashings. Why not give the entire building the same protection?

*MAKE THE SPECIFICATIONS READ—USE*

### "Follansbee Banfield Process" Roofing Tin

HAMMERED OPEN HEARTH

Made by FOLLANSBEE BROTHERS CO.

PITTSBURGH, PA.

BRANCHES IN ALL PRINCIPAL CITIES

The Makers of SCOTT'S EXTRA COATED

Hammered Open Hearth  
ROOFING TIN

SEND TODAY AND RECEIVE FREE AND PREPAID  
FOLLANSBEE ROOF BOOK AND SAMPLES  
NAME .....  
ADDRESS .....  
To FOLLANSBEE BROS. CO.  
PITTSBURGH, PA.



# PURITAN CORDAGE MILLS

INCORPORATED

Manufacturers of Cotton Sash Cord, Rope and Clothes Lines

LOUISVILLE, KY.



"REGAL" Sash Cord is always marked with TWO BLUE STRANDS

**PRODUCTS**—"REGAL" COTTON BRAIDED SASH CORD.

**"REGAL" CORD**—We are the sole manufacturers of the cord of this name. Every hank of the product can be identified by the name "Regal" printed on the label, which is around every hank.

"Regal" Cord is further characterized and distinguishable from any other Sash Cord by having **two blue strands braided in the cord, which appear on the surface in the form of a broken spiral line.** This is done to enable the architect to distinguish "Regal" cord after the label has been removed and the cord has been put in the building.

**Note.** "Regal" Cord is the only sash cord that is marked with two blue strands.

The above are the outward means of identifying "Regal" Cord and distinguishing it from inferior goods on the market. It remains to describe the quality of material and careful manufacture upon which the high position of "Regal" Sash Cord is founded.

## MATERIAL AND MANUFACTURE —

"Regal" Sash Cord is made on the latest style improved braiding machinery. Nothing but the longest fiber white staple cotton is used in its manufacture. **This makes the cord as tough and durable** as possible. This cord is braided firm, but not so stiff that it will "kink" and wear over the pulleys. Sash Cord made of long-fiber cotton will outwear any chain or other metal devices. The quality of the cotton joined to the superior machine work produce a cord of **perfect finish.**

To further protect the product against even the remotest chance of a defect or blemish slipping in, every foot of it undergoes four **separate inspections.**

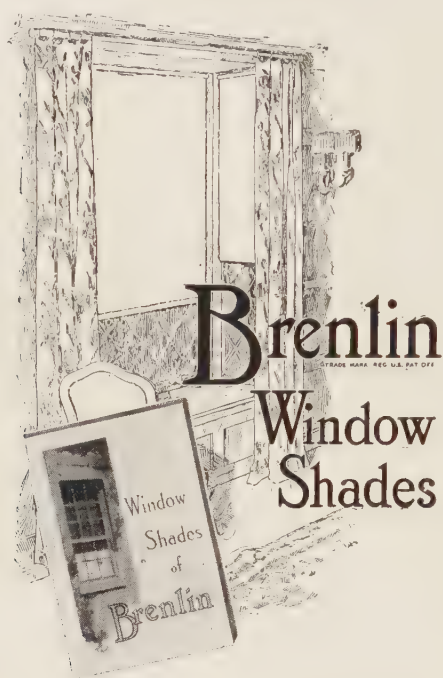
The result of all the above is to make "Regal" cord-hung windows work as if they were ball-bearing provided a well-made pulley is used. Every architect knows what an annoyance badly-acting windows are in a house. Avoid it by using **"Regal" Sash Cord.**

**TEST**—"Regal" Sash Cord has been put to a most severe test by the U. S. A. Department of Commerce and Labor and has been thoroughly approved for use on all government work. This is about the highest recommendation a sash cord can obtain, as government tests of this material are the most severe tests made.

"Regal" Sash Cord has stood the most severe tests of any sash cord manufactured and has clearly proven its ability to far outwear the best metal sash chain as well as any other leading brand of cord. We would like to have any architect interested write for proofs of these statements, which we can furnish by government tests and tests of other well-known parties.

"Regal" Cord is always marked with **Two Blue Strands**, and it is the only sash cord that is marked with **Two Blue Strands.** It is marked in this manner so as to distinguish it from all other markings of sash cord.

**SAMPLES**—We will be pleased to send samples to architects upon request; also, results of other tests proving its superiority over other cords.



## Before you select your shades write for this book

This book not only tells why it is more **ECONOMICAL** to buy Brenlin Shades, but shows how clever housekeepers everywhere are using Brenlin to make their windows more attractive. It contains actual samples of Brenlin in all grades and many rich colors, and gives valuable suggestions for their artistic use in harmonizing room color schemes and draperies.

With this book we will send you the name of the Brenlin dealer in your town who will supply you with the three grades of Brenlin. The Brenlin Unfilled Shade is made of closely woven cloth without the "filling" that causes ordinary shades to crack and show unsightly streaks and pinholes. Sun won't fade it nor water spot it. It is supple—not stiff—and always hangs straight and smooth. And it **REALLY SHADES**.

Brenlin is made in many artistic colors and in Brenlin Duplex. With Brenlin Duplex you can have a uniform color outside and different colors inside to harmonize with the different colors of each room.

Brenlin is **NOT** expensive. To buy Brenlin is an investment, for it will last longer, look better, and give you better all around satisfaction than other shades.

Write for the Brenlin Book to-day.

CHAS. W. BRENNEMAN & CO., Reading Road, CINCINNATI, OHIO.

**There is a Brenlin dealer in nearly every town. If there should not be one in yours, write us and we will supply you direct. We satisfactorily fill hundreds of mail orders every year.**

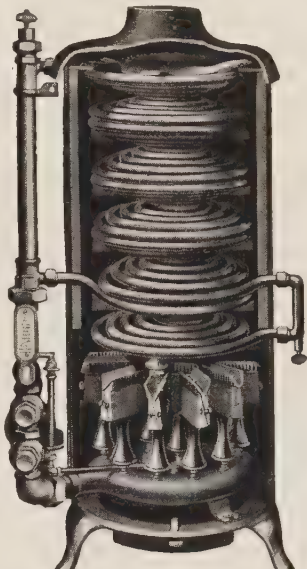


THE "HOFFMAN" LEADS THEM ALL

If you contemplate using a gas water heater of any kind, you will find it in the "Hoffman" line. Tank Heaters, Automatic Heaters, House Heaters and Thermostatic Valves. Just give us an idea of what you want and we will gladly advise you which Heater will be the most suitable to your needs. Tell us the size of your residence, the number of hot water faucets and from this we can advise you just what would suit you best. All information free without obligations on your part.



Automatic Water Heater



Automatic Water Heater

INSTANTANEOUS AUTOMATIC WATER HEATERS

No.	Capacity per Minute	List Price
2A	2½ gals.	\$ 40.00
3A	3 "	50.00
28	3 "	50.00
3D	3 "	85.00
4D	4 "	100.00
6F	6 "	130.00

STORAGE HEATERS

No.	Heating Capacity Per Hour	
200	200 gals.	\$120.00
300	300 "	150.00
500	500 "	200.00

HOUSE HEATERS

No.	Radiation Hot Water	Radiation Steam	
500	500 ft.	300 ft.	\$120.00
800	800 "	500 "	150.00
1100	1100 "	700 "	200.00

TANK HEATERS

Illustrated on Page 69.

Multicoil Storage or House Heater					
No. 1	Single Coil for	24 to 30	gallon boiler		\$12.50
" 1½	"	30 to 40	"		15.00
" 2	"	30 to 50	"		20.00
" 16	Double	40 to 50	"		16.00
" 18	"	40 to 60	"		18.00
" 20	"	40 to 70	"		20.00
" 9	"	Special for 40 to 60 gallons boiler			18.00



THE HOFFMAN HEATER CO. LORAIN, OHIO

# Screens for Every Purpose

We make screens with wood frames and with metal frames which may be used either inside or outside of window. We successfully screen all openings in residences and all other classes of buildings. Our screens are made for every kind and size of opening also to meet every condition and requirement—

**Full length, Top-hung Screens**  
**French Window Screens**  
**Stationary Screens**  
**Casement Screens**  
**Sliding Screens**  
**Porch Screens**  
**etc.**

Specializing has brought about many refinements in the WATSON 20TH CENTURY METHOD OF SCREENING—many little details which, while they are usually unseen, add much to the convenience and ease of operation. Without these details, any method of screening must always fall short of complete satisfaction.

**Watson Manufacturing Company**  
--- Jamestown, N. Y. ---

**J. J. RAUSCHER**

SALES AGENT  
BUILDERS' EXCHANGE

CLEVELAND, OHIO

TELEPHONES CUYAHOGA CENTRAL 1575  
BELL, MAIN 4000



# Chamberlin—needed wherever there is a window or door

You cannot have real comfort in your home without Chamberlin Equipment which—

- Eliminates draughts
- Keeps out dust and soot
- Stops rattling of windows
- Insures uniform heat (no matter what the velocity of the wind lor the outside temperature)
- Allows the largest windows to slide easily
- Saves from 20 to 40 per cent. in fuel
- Deadens street noises

It makes no difference how well the doors and windows fit, the wood is effected by weather conditions. As a result there is a constant leakage both in and out, allowing the warmed air out, and the cold air to blow in which causes not only draughts, but it brings in dust, dirt and soot.

Chamberlin Equipment prevents this. It gives you more real comfort in your home than you thought possible. It is not a luxury, it is a necessity which pays for itself many times over, not only in comfort and satisfaction, but in actual money, by reducing the fuel bills.

Special tools are needed for installing Chamberlin and careful work must be done in order to make the equipment effective. For these reasons all Chamberlin Equipment is put in by our own mechanics and always under our direct supervision. There are over six hundred expert mechanics employed exclusively for putting in our equipment.

A line to this office, or any of our offices, will give you data and information on any point.

## Chamberlin Metal Weather Strip Company

### BUILDERS' EXCHANGE

#### OHIO DISTRICT:

J. J. RAUSCHER, MGR.

HAROLD McGEORGE, CONSULTING ENGR.

CLEVELAND, OHIO.

Factories — Detroit, Mich. and Peru, Ill.

General Offices—Detroit.

BRANCH OFFICES IN ALL LARGE CITIES



THESE  
HOMES of CHARACTER  
OR ANY OTHER DESIGN  
PLANNED, BUILT, FINANCED

WE BUILD fifty houses annually and have the best possible facilities for the construction of your house in a manner that will make your home not only first class in material and workmanship but one of which you will be proud.

We not only buy the best of everything, buy it in large quantities, oversee the work personally, employ men who have been with us for years for all parts of the construction thus saving all subcontractors profits but if necessary furnish money for the construction of your house on a plan whereby it can be paid on a monthly basis the same as rent.

We are experts in our line and should be pleased to offer our advice and counsel along the building line.

Bids submitted, our plans explained and prompt attention given to all inquiries.

THE DIXON BUILDING COMPANY

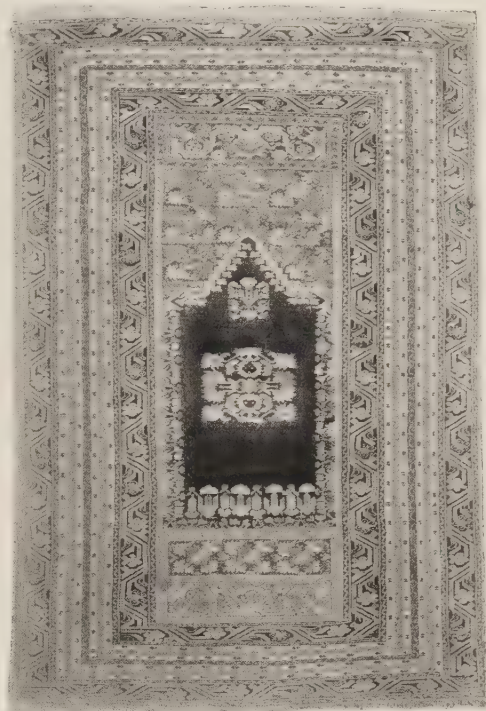
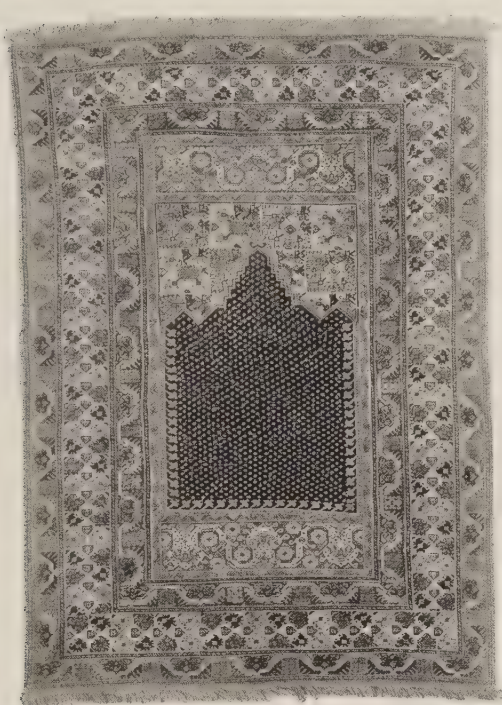
E. G. GILBERT, MANAGER

911 WILLIAMSON BUILDING

Main 1471  
Central 5118

CLEVELAND, OHIO





Above are illustrations of two very rare antique Ghordies Rugs from our collection. Genuine and authentic 17th century pieces.



## Oriental Rugs of Quality

MODERATELY PRICED

**E**VERY requirement for the home in genuine Oriental Rugs can be met with the utmost satisfaction by our immense stock of the different weaves from the Orient.

As exclusive dealers and direct importers of Fine Rugs, our purchasing facilities are naturally better than the average store. The authentic character of every rug is guaranteed.

We gladly ship rugs prepaid to any part of the country for inspection. Estimates on contracts for furnishing rugs for an entire house will be given.

**D. ASADORIAN**  
 DIRECT IMPORTERS  
 1244 EUCLID AVE.

# Right Painting Both Adorns and Protects

THE painting of the house makes or mars the beauty of the home. It must harmonize in color with its surroundings—like a gem in a setting.

And the paint must have character, spread evenly and hold firmly to the surface without crack, blotch or blister.

## Dutch Boy Painter

### *Pure White Lead*

The one exactly right way to paint is to have an experienced painter mix the paint "on the premises," using pure white lead, pure linseed oil and turpentine, each in the proper proportion for each particular surface.

Tinting colors are added to the white lead, under your own supervision, and tried on the actual surface till you get the color effect you desire.

We can demonstrate to you that there is a great difference between ordinary painting and "Dutch Boy" white leading, if you will let us—a difference which means greater satisfaction at no greater cost.

Don't risk spoiling an attractive place by improper painting.

Be sure you get pure white lead—for the sake of durability as well as appearance. "Dutch Boy Painter"

White Lead is standard. When mixed with pure linseed oil it forms the most durable paint in the world.

### *Let Us Help You Solve Your Painting Problem*

To find out how to use the color schemes shown in "Homes of Character," write us for "Helps No. A."

These "Helps" include painting specifications, booklets, color schemes, etc. If none of these color combinations fits your needs, send us a photograph of your house with its surroundings and let us suggest a special color scheme.



The "Dutch Boy Painter" is the trade mark on our pure white lead and on our linseed oil in sealed cans.

## National Lead Company

New York  
San Francisco

Boston  
(John T. Lewis & Bros. Co., Philadelphia)

Buffalo

Cincinnati

Chicago

Cleveland

St. Louis

(National Lead & Oil Co., Pittsburgh)

*A house white-leaded is a house painted right*



Blank for Inquiries Regarding Cost of Houses

City and Date.....

John Henry Newson, Inc.,  
Williamson Building,  
Cleveland, Ohio.

Dear Sirs:

Please make an estimate of the cost of house number.....  
in your book, "Homes of Character" if built under the following conditions:

1. Wages and number of hours work per day for masons? .....

For carpenters? ..... For plumbers? .....

Common labor? .....

2. Present prices of bill stuff per thousand? ..... Siding? .....

Shingles? ..... Interior finish? .....

Hardwood flooring? ..... Brick per thousand? .....

Stone per perch or ton? ..... Hollow tile per thousand? .....

Cement per bbl.? ..... Are building trades busy? .....

Remarks:.....

This estimate to be made and sent without charge or expense to me.

Name.....

Street and No.....

City..... State.....

100

100

100

100

100

100

100

100

100

100



## Order Blank for Sketches of Special Designs

City and Date .....

John Henry Newson, Inc.,  
Williamson Building,  
Cleveland, Ohio.

Dear Sirs:

I enclose herewith .....

N. Y. Draft, Express or P. O. Money Order

for \$..... and sketch of house of which I desire you to make and send me preliminary drawings, perspective of exterior, and estimate of cost. This order is given with the express understanding that the amount enclosed covers your entire charge for this preliminary work, and that said amount shall apply as part payment on your charges for the final drawings and specifications, as stated in your book "Homes of Character," should I order you to make them after inspecting the preliminary work. In no event is this letter to be construed as an order for the final plans and specifications.

To aid you in the preliminary work, I give the following information:

### LOT

1. Size and shape of lot? .....
2. Is the lot level? .....  
If not, give slope. ....
3. Soil? .....  
Sand, Clay, Gravel, etc. ....
4. Distance house will set from street ..... feet.
5. Which way will house face? .....  
North, South, East, West. ....
6. Which side will drive be? .....  
North, South, East, West. ....
7. Building restrictions? .....

### HOUSE

8. Type of construction .....  
Frame, Brick, Hollow Tile, Brick Veneer, Stucco on Frame, etc. ....

### MASON WORK

9. Foundation material? .....  
Hollow Tile, Brick, Stone, Concrete, etc. ....
10. Ashlar? .....  
Brick, Stone, Artificial Stone, etc. ....
11. Cellar floor cemented? .....
12. Sewer or cesspool? .....
13. Outside steps? .....  
Stone, Cement or Wood. ....

### CARPENTER

14. Framing lumber or bill stuff? .....  
Hemlock, Pine, etc. ....
15. Rough floors (Sub-floors)? .....  
Hemlock, Pine, etc. ....
16. Sheathing? .....  
Hemlock, Pine, etc. ....
17. Exterior finish? .....  
Pine, Cypress, etc. ....
18. Siding? .....  
Shingles, Lap Siding, Wide Lap Siding, Patent Siding, etc. ....
19. Interior finish? .....  
Specify by rooms. Oak, Birch, Poplar, Yellow Pine, etc. ....
20. Doors? .....  
Front, Vestibule, Rear, First Floor, Second Floor, etc. ....  
If stock designs, give catalogue number. ....
21. Finished floors? .....  
Specify by rooms. Oak, Birch, Maple, Yellow Pine, etc. ....  
Parquet or ordinary floors? Laid plain, with border, or in special designs. ....
22. Panel wainscot or beam ceilings? .....  
Specify by rooms. ....
23. Special work? .....  
Sideboards, Book-cases, etc. ....
24. Mantels? .....  
Brick, Tile, Stock Design Wood Mantels, etc. ....
25. Pantryette? .....  
Give Number ....
26. Roof? .....  
Tin, Slate, Tile, Shingle, etc. ....
27. Glass? .....  
Sheet or Plate ....
28. Leaded glass? .....  
Specify Where. ....

29. Mirror doors? .....  
 30. House wired for electricity? .....  
 32. Screens? .....  
 31. All rooms plastered? .....  
 33. Weather strip? .....

#### PAINTING

34. Interior woodwork? .....  
 35. Finish of finished floors? .....  
 Painted, Waxed, Varnished or Enameled  
 Shellac, Wax, Varnish, etc.

Specify each room.

#### PLUMBING

36. House piped for gas? ..... Natural gas? .....  
 37. City water? ..... Tank or pressure system from well or cistern? .....  
 38. Kind of plumbing fixtures? .....  
 Vitreous China, Porcelain or Enameled Iron  
 (a) Bathroom? .....  
 Tub, Lavatory, Water Closet, Shower, etc.,  
 (b) Toilet room? .....  
 Lavatory, Water Closet, etc.  
 (c) Kitchen? .....  
 Sink, etc.  
 (d) Other fixtures? ..... (e) Water closet in basement? .....  
 Kind  
 (f) Hot water heater? .....  
 Ordinary, with Tank, or Instantaneous.  
 (g) Vacuum Cleaner? .....

#### HEATING

39. How is house to be heated? .....  
 Hot Air, Hot Water, Vapor System, or Steam Furnace

#### TILE

40. Tile floors, wainscot, etc.? .....  
 Specify Bathroom, Toilet Room, Vestibule, etc.

#### GENERAL

41. Are snows heavy? ..... 42. How deep does the ground freeze? ..... feet.  
 43. Which house in this book do you like best? .....  
 Give Number.  
 44. Shall we follow your plan strictly, or may we make suggestions? .....

45. What is your limit of total cost? .....  
 Remarks: .....

#### FOR ESTIMATING COST

46. Wages and number of hours per day for masons? .....  
 For carpenters? ..... For plumbers? .....  
 Common labor? .....  
 47. Present price of bill stuff per thousand? ..... Siding? .....  
 Shingles? ..... Interior finish? .....  
 Hardwood flooring? ..... Brick? .....  
 Stone? ..... Hollow tile? ..... Cement? .....  
 Are building trades busy? .....

Name .....  
 Street and No. ....  
 City ..... State .....



## Order Blank Sketches for Stock Plans

City and Date .....

John Henry Newson, Inc.,  
Williamson Building,  
Cleveland, Ohio.

Dear Sirs:

I enclose herewith .....

N. Y. Draft, Express or P. O. Money Order

for \$..... for which please send me by ..... Express Co.  
three sets of blue prints of complete scale working drawings and three sets of \*specifications of house  
Number ..... in your book "Homes of Character." These plans and \*specifications to include  
all the necessary detail drawings, etc. as set forth in said book.

If you want plans reversed please so state in ordering.

\* Cut out "specifications" if you do not want them. If you want specifications please answer the  
following questions:

### LOT

1. Size and shape of lot? .....
2. Is the lot level? .....  
If not, give slope.
3. Soil? .....  
Sand, Clay, Gravel, etc.
4. Distance house will set from street ..... feet.
5. Which way will house face? .....  
North, South, East, West.
6. Which side will drive be? .....  
North, South, East, West.
7. Building restrictions? .....

### HOUSE

8. Type of construction .....  
Frame, Brick, Hollow Tile, Brick Veneer, Stucco on Frame, etc.

### MASON WORK

9. Foundation material? .....  
Hollow Tile, Brick, Stone, Concrete, etc.
10. Ashlar? .....  
Brick, Stone, Artificial stone, etc.
11. Cellar floor cemented? .....
12. Sewer or cesspool? .....
13. Outside steps? .....  
Stone, Cement or Wood.

### CARPENTER

14. Framing lumber or bill stuff? .....  
Hemlock, Pine, etc.
15. Rough floors (Sub-Floors)? .....  
Hemlock, Pine, etc.
16. Sheathing? .....  
Hemlock, Pine, etc.
17. Exterior finish? .....  
Pine, Cypress, etc.
18. Siding? .....  
Shingles, Lap Siding, Wide Lap Siding, Patent Siding, etc.
19. Interior finish? .....  
Specify by rooms. Oak, Birch, Poplar, Maple, Yellow Pine, etc.
20. Doors? .....  
Front, Vestibule, Rear, First Floor, Second Floor, etc.  
If stock designs, give catalogue number.
21. Finished floors? .....  
Specify by rooms. Oak, Birch, Maple, Yellow Pine, etc.  
Parquet or ordinary floors? Laid plain, with border, or in special designs.
22. Panel wainscot or beam ceilings? .....  
Specify by rooms.
23. Special work? .....  
Sideboards, Book-cases, etc.

- |  |  |
|--|--|
| 24. Mantels? .....                     | Brick, Tile, Stock Design Wood Mantels, etc. |
| 25. Pantryette? .....                  | 26. Roof? .....                              |
| Give Number                            | Tin, Slate, Tile, Shingle. etc.              |
| 27. Glass? .....                       | 28. Leaded glass? .....                      |
| Sheet or Plate                         | Specify Where.                               |
| 29. Mirror doors? .....                | Specify Where.                               |
| 30. House wired for electricity? ..... | 31. All rooms plastered? .....               |
| 32. Screens? .....                     | 33. Weather strip? .....                     |

## PAINTING

34. Interior woodwork? ..... Painted, Waxed, Varnished or Enameled
35. Finish of finished floors? ..... Shellac, Wax, Varnish, etc.

Specify each room.

## PLUMBING

36. House piped for gas? ..... Natural gas? .....
37. City water? ..... Tank or pressure system from well or cistern? .....
38. Kind of plumbing fixtures? ..... Vitreous China, Porcelain or Enameled Iron
- (a) Bathroom? ..... Tub, Lavatory, Water Closet, Shower, etc., if possible.
- .....
- (b) Toilet room? ..... Lavatory, Water Closet, etc.
- (c) Kitchen? ..... Sink, etc.
- (d) Other fixtures? ..... (e) Water closet in basement? ..... Kind
- (f) Hot water heater? ..... Ordinary, with Tank, or Instantaneous.
- (g) Vacuum Cleaner Pipes? .....

## HEATING

39. How is house to be heated? ..... Hot Air, Hot Water, Vapor System, or Steam Furnace

## TILE

40. Tile floors, wainscot, etc.? ..... Specify Bathroom, Toilet Room, Vestibule, etc.

## GENERAL

41. Are snows heavy? ..... 42. How deep does the ground freeze? ..... feet.

Name .....

Street and No. ....

City ..... State .....



## Blank for Sketch

